NACOmatic

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Contact:
Doug Ranz
248-318-0011
NACOmatic@hotmail.com

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INSTRUMENT APPROACH PROCEDURE CHARTS

AIFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME ALTERNATE MINIMUMS

ABERDEEN PROVING GROUND, MD

PHILLIPS AAF (KAPG) ..... **NDB Rwy 22**
VOR Rwy 22
VOR/DME Rwy 22
RNAV (GPS) Rwy 22
NA when control tower closed.

ABINGDON, VA

VIRGINIA HIGHLANDS ..... **LOC Rwy 24**
RNAV (GPS) Rwy 6
RNAV (GPS) Rwy 24
VOR/DME-B
NA when local weather not available.
Category C, 800-2¼, Category D, 800-2½.

ANNAPOLIS, MD

LEE ..... **RNAV (GPS)-A**
NA when local weather not available.

BALTIMORE, MD

BALTIMORE-WASHINGTON INTL
THURGOOD MARSHALL **ILS or LOC Rwy 15L[1]**
ILS or LOC Rwy 28[2]
VOR Rwy 10[3]
[1]ILS, LOC, Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]ILS, Categories A,B,C, 700-2; Category D 700-2¼; LOC, Category D, 800-2¼.
[3]Categories A,B,1100-2;Category C,D 1100-3.

MARTIN STATE ..... **ILS or LOC Rwy 33[123]**
LOC Rwy 15[2]
VOR/DME or TACAN Z Rwy 15[4]
[1]ILS, Category D, 700-2.
[2]NA when control tower closed.
[3]NA when local weather not available.
[4]Categories A,B, 900-2; Category C, 900-2½; Category D 900-2¾.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY
EXECUTIVE ..... **RNAV (GPS) Rwy 12**
RNAV (GPS) Rwy 30
NA when local weather not available.

NAME ALTERNATE MINIMUMS

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-
ALBEMARLE ..... **ILS or LOC Rwy 3[12]**
RNAV (GPS) Rwy 3[34]
RNAV (GPS) Y Rwy 21[35]
RNAV (GPS) Z Rwy 21[34]
[1]NA when control tower closed.
[2]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 1000-3. LOC, Category C, 800-2¼; Category D, 1000-3.
[3]NA when local weather not available.
[4]Category D, 1000-3.
[5]Category C, 800-2¼; Category D, 1000-3.

COLLEGE PARK, MD

COLLEGE PARK ..... **RNAV (GPS) Rwy 15**
NA when local weather not available.

CULPEPER, VA

CULPEPER RGNL ..... **LOC Rwy 4[1]**
RNAV (GPS) Rwy 4[2]
RNAV (GPS) Rwy 22[2]
VOR-A[2]
[1]NA when FBO closed.
[2]NA when local weather not available.

DANVILLE, VA

DANVILLE RGNL ..... **VOR Rwy 20**
Category C, 800-2¼; Category D, 800-2½.

DUBLIN, VA

NEW RIVER VALLEY ..... **VOR or GPS-A**
Category D, 800-2¼.

EASTON, MD

EASTON/
NEWNAM FIELD ..... **ILS or LOC/DME Rwy 4[1]**
RNAV (GPS) Rwy 4
RNAV (GPS) Rwy 15
RNAV (GPS) Rwy 22
RNAV (GPS) Rwy 33
NA when local weather not available.
[1]ILS,LOC, NA when control tower closed.

NAME ALTERNATE MINIMUMS

EMPORIA, VA
EMPORIA-GREENSVILLE RGNL ..... **RNAV (GPS) Rwy 15**
NA when local weather not available.

FELKER AAF (KFAF)
FORT EUSTIS, VA.....ORIG 08297
NDB Rwy 14
COPTER NDB Rwy 14
RNAV (GPS) Rwy 14
COPTER RNAV (GPS) Rwy 14
NA when control tower closed.

FREDERICK, MD
FREDERICK MUNI ..... **RNAV (GPS) Rwy 5[12]**
RNAV (GPS) Y Rwy 23[1]
RNAV (GPS) Z Rwy 23[3]
[1]Category D, 800-2½.
[2]NA when local weather not available.
[3]Categories A,B,C,D, 800-2½.

GAITHERSBURG, MD
MONTGOMERY COUNTY AIRPARK ..... **NDB Rwy 14**
Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

GALAX/HILLSVILLE, VA
TWIN COUNTY ..... **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19
NA when local weather not available.

GEORGETOWN, DE
SUSSEX COUNTY ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 22
NA when local weather not available.

HAGERSTOWN, MD
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD ..... **ILS or LOC Rwy 9[1]**
ILS or LOC Rwy 27[1]
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 27
VOR Rwy 9
NA when local weather not available.
[1]NA when control tower closed.

HOT SPRINGS, VA
INGALLS FIELD ..... **RNAV (GPS) Rwy 7**
NA when local weather not available.
Categories, A, B, 1000-2; Category C, 1000-2¾, Category D, 1000-3.

LEESBURG, VA
LEESBURG EXECUTIVE .. **RNAV (GPS) Rwy 17**
LPV, Category D, 700-2.

NAME ALTERNATE MINIMUMS

LEONARDTOWN, MD
ST. MARY'S COUNTY RGNL ..... **RNAV (GPS) Rwy 11**
RNAV (GPS) Rwy 29
NA when local weather not available.

LOUISA, VA
LOUISA COUNTY/ FREEMAN FIELD ..... **RNAV (GPS) Rwy 27**
NA when local weather not available.

LYNCHBURG, VA
LYNCHBURG RGNL/PRESTON GLENN FIELD ..... **ILS or LOC Rwy 4[12]**
RNAV (GPS) Rwy 4[3]
RNAV (GPS) Rwy 22[3]
VOR/DME Rwy 22[4]
VOR Rwy 4[3]
[1]ILS,LOC, NA when control tower closed.
[2]ILS,Categories A,B, 800-2;Category C,900-2½, Category D, 900-2¾. LOC,Category C,900-2½, Category D, 900-2¾.
[3]Category C, 900-2½; Category D, 900-2¾.
[4]Categories A,B, 900-2; Category C, 900-2½, Category D, 900-2¾.

MANASSAS, VA
MANASSAS RGNL/HARRY P DAVIS FIELD ..... **ILS or LOC Rwy 16L,**700-2
RNAV (GPS) Rwy 16L
NA when control tower closed.

MARION/WYTHEVILLE, VA
MOUNTAIN EMPIRE ..... **RNAV (GPS) Rwy 26**
NA when local weather not available.
Category C, 800-2¼.

MARTINSVILLE, VA
BLUE RIDGE ..... **RNAV (GPS) Rwy 30**
NA when local weather not available.
Categories A,B, 1000-2; Categories C,D, 1000-3.

MELFA, VA
ACCOMACK COUNTY ..... **RNAV (GPS) Rwy 3**
RNAV (GPS) Rwy 21
NA when local weather not available.

MIDDLETOWN, DE
SUMMIT ..... **RNAV (GPS) Rwy 17**
RNAV (GPS) Rwy 35
NA when local weather not available.

NAME ALTERNATE MINIMUMS

NEWPORT NEWS, VA

NEWPORT NEWS/WILLIAMSBURG INTL ..... **ILS or LOC Rwy 7[12]**
ILS or LOC Rwy 25[1]
LOC/DME Rwy 20[12]
RNAV (GPS) Rwy 7[2]
RNAV (GPS) Rwy 20[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

OCEAN CITY, MD

OCEAN CITY MUNI ..... **RNAV (GPS) Rwy 2[1]**
RNAV (GPS) Rwy 32[12]
VOR-A[3]

[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.

PETERSBURG, VA

DINWIDDIE COUNTY ..... **RNAV (GPS) Rwy 5**
RNAV (GPS) Rwy 23
VOR Rwy 23

NA when local weather not available.

RICHLANDS, VA

TAZEWELL COUNTY ..... **LOC/DME Rwy 25**
RNAV (GPS) Rwy 25

NA when local weather not available.

RICHMOND, VA

RICHMOND INTL ..... **ILS or LOC Rwy 16**

ILS, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3.
LOC, Categories A,B, 900-2, Category C, 900-2¾, Category D, 900-3.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI ..... **RNAV (GPS) Rwy 16**
VOR Rwy 16[1]

NA when local weather not available.
[1]Category C, 800-2¼, Category D, 800-2½.

NAME ALTERNATE MINIMUMS

ROANOKE, VA

ROANOKE RGNL/WOODRUM FIELD ..... **ILS or LOC Rwy 33[12]**
LDA Rwy 6[2]
VOR/NDB Rwy 33[3]

[1]ILS, Categories A,B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.
[2]Categories A,B, 1600-2; Categories C,D, 1600-3.
[3]Categories A,B, 1400-2; Categories C,D, 1400-3.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL ..... **ILS or LOC Rwy 32**
RNAV (GPS) Rwy 32
VOR Rwy 23[1]

NA when local weather not available.
[1]Categories A, B, 1100-2; Categories C, D, 1100-3.

STAUNTON-WAYNESBORO-HARRISONBURG, VA

SHENANDOAH VALLEY RGNL ..... **ILS or LOC Rwy 5[1]**
NDB Rwy 5
RNAV (GPS) Rwy 5
RNAV (GPS) Rwy 23

NA when local weather not available.
[1]ILS, Category D, 700-2.

SUFFOLK, VA

SUFFOLK EXECUTIVE ..... **RNAV (GPS) Rwy 4**
RNAV (GPS) Rwy 7

NA when local weather not available.

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY ..... **VOR/DME or TACAN Rwy 10**

Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

WASHINGTON, DC

WASHINGTON
DULLES INTL ..... **ILS or LOC/DME Rwy 1C[1]**
ILS or LOC/DME Rwy 1L[1]
ILS or LOC/DME Rwy 12[1]
ILS or LOC/DME Rwy 19C[1]
ILS or LOC/DME Rwy 19R[1]
ILS or LOC Rwy 1R[1]
ILS or LOC Rwy 19L[1]
RNAV (GPS) Y Rwy 19R[2]

[1]ILS, Categories A, B, C, D, 700-2.
[2]Category D, 800-2¼.

RONALD REAGAN
WASHINGTON NATIONAL ..... **ILS Rwy 1[1]**
LDA/DME Rwy 19[2]
RNAV (GPS) RWY 33[3]
ROSSLYN LDA Rwy 19, 1100-3
VOR/DME or GPS Rwy 15[4]
VOR/DME or GPS Rwy 19[5]
VOR Rwy 1[2]

[1]ILS, Categories A, B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]Category D, 800-2¼.
[3]Categories A,B,C,D, 800-2½.
[4]Categories A,B, 1000-2;Category C, 1000-2¾; Category D, 1000-3.
[5]Categories A,B, 1000-2; Categories C,D, 1000-3.

WEST POINT, VA

MIDDLE
PENINSULA RGNL ..... **RNAV (GPS) Rwy 10**
VOR-A

NA when local weather not available.

WILMINGTON, DE

NEW CASTLE ..... **ILS or LOC Rwy 1[12]**
RNAV (GPS) Rwy 1[2]
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 19[2]
RNAV (GPS) Rwy 27[2]
VOR Rwy 27[3]

[1]NA when contol tower closed.
[2]NA when local weather not available.
[3]Category D, 800-2¼.

WINCHESTER, VA

WINCHESTER RGNL ..... **RNAV (GPS) Rwy 14**
RNAV (GPS) Rwy 32
VOR/DME-A

NA when local weather not available.

WISE,VA

LONESOME PINE ..... **RNAV (GPS) Rwy 6[12]**
RNAV (GPS) Rwy 24[3]

[1]NA when local weather not available.
[2]Category D, 800-2¼.
[3]Category C, 800-2¼; Category D, 900-2¾.

ANDREWS AFB (KADW), (CAMP SPRINGS) MD (09127 USAF)

RADAR - (E) 113.1T 124.0 128.35 257.2 286.6 301.5 316.7 335.5 360.8 379.2 ▽T **ELEV 280**

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	1L[1]		AB	**760**/24	500	(500-½)
			C	**760**/40	500	(500-¾)
			D	**760**/50	500	(500-1)
			E	**760**/60	500	(500-1¼)
	19R[4]		AB	**780**/24	507	(500-½)
			CD	**780**/50	507	(500-1)
			E	**780**/60	507	(500-1¼)
	19L[2]		ABC	**720**/40	440	(500-¾)
			DE	**720**/50	440	(500-1)
	1R[1]		ABC	**760**/40	495	(500-¾)
			D	**760**/50	495	(500-1)
			E	**760**/60	495	(500-1¼)
CIR[3]	19L		A	**720**-1	440	(500-1)
			B	**740**-1	460	(500-1)
			C	**740**-1½	460	(500-1½)
			DE	**840**-2	560	(600-2)
	19R		AB	**780**-1	500	(500-1)
			C	**780**-1½	500	(500-1½)
			DE	**840**-2	560	(600-2)
	1L, 1R		AB	**760**-1	480	(500-1)
			C	**760**-1½	480	(500-1½)
			DE	**840**-2	560	(600-2)

[1]When ALS inop, increase CAT AB RVR 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles and CAT E vis to 1¾ miles. [2]When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile,CAT C RVR to 60 and vis to 1¼ miles and CAT DE vis to 1½ miles. [3]Circling not authorized W of Rwy 1L-19R. [4]When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½.

DAVISON AAF (KDAA), VA (Ft. Belvoir) (Amdt 10A, 09211 USA) **ELEV 73**

RADAR[1] - (E) 118.85 119.95 248.5x 265.6 ▽T ⚠ NA

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR	32	3.0°/22/414	ABCD	**333**/40	265	(300-¾)
	14	3.0°/59/937	ABCD	**635**-2	575	(600-2)

[1]Opr 1100-2300Z++ wkd excld hol, R-IFF SIF svc not avbl.

NORFOLK NS (KNGU), (CHAMBERS FIELD), VA (09267 USN) ELEV 7

RADAR - (E) 119.2x 120.2x 279.525 322.525 335.8 353.55 T

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	10[23]	3.0°/50/948	ABCDE	**117**-¼	100	(100-¼)
	28[4]	3.0°/36/682	ABCDE	**265**-¾	250	(300-¾)
COPTER PAR[1]	10[23]	3.0°/50/948	COPTER	**117**-¼	100	(100-¼)
	28[4]	3.0°/36/682	COPTER	**265**-¾	250	(300-¾)
PAR W/O GS[1]	28[5]		ABCDE	**460**-1	445	(500-1)
	10[6]		ABC	**460**-¾	443	(500-¾)
			DE	**460**-1	443	(500-1)
ASR[1]	10[7]		AB	**520**-¾	503	(600-¾)
			CD	**520**-1	503	(600-1)
			E	**520**-1¼	503	(600-1¼)
	28[6]		ABC	**460**-1	445	(500-1)
			DE	**460**-1¼	445	(500-1¼)
CIR ASR[89]	10, 28		AB	**520**-1¼	503	(600-1¼)
			C	**520**-1½	503	(600-1½)
			DE	**580**-2	563	(600-2)
CIR PAR W/O GS[89]	10, 28		AB	**520**-1¼	503	(600-1¼)
			C	**520**-1½	503	(600-1½)
			DE	**580**-2	563	(600-2)

[1]No-NOTAM preventive maint Mon 1200-1800Z++. [2]When ALS inop, increase vis CAT ABCDE to ½ mile. [3]PAPI RRP and PAR RPI are not coincidental. [4]When ALS inop, increase vis CAT ABCDE to 1 mile. [5]When ALS inop, increase vis CAT ABCDE to 1¼ miles. [6]When ALS inop, increase vis CAT ABC to 1¼ miles, CAT DE to 1½ miles. [7]When ALS inop, increase vis CAT AB to 1¼ miles, CAT CD to 1½ miles, CAT E to 1¾ miles. [8]CAT E cir not authorized south of Rwy 10-28. [9]Norfolk NS Heliport lctd 1 NM NW, use caution in cir apch.

OCEANA NAS (KNTU), (APOLLO SOUCEK FIELD) VA (09351 USN) ELEV 23

RADAR - (E) 124.825 310.8 328.4 346.4 348.75 352.1 363.1

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[8]	5R[1]	3.0°/36/686	ABCDE	**120**-¼	100	(100-¼)
	23L[1]	3.0°/42/809	ABCDE	**122**-¼	100	(100-¼)
	5L	3.0°/40/753	ABCDE	**121**-½	100	(100-½)
	23R	3.0°/44/841	ABCDE	**121**-½	100	(100-½)
	32L[1]	3.0°/41/782	ABCDE	**123**-¼	100	(100-¼)
	14R	3.0°/38/711	ABCDE	**272**-1	250	(300-1)
PAR W/O GS[8]	14R		ABCDE	**360**-1¼	338	(400-1¼)
	5R[2]		ABCD	**420**-¾	400	(400-¾)
			E	**420**-1	400	(400-1)
	5L		ABCD	**420**-1¼	399	(400-1¼)
			E	**420**-1½	399	(400-1½)
	32L[4]		ABCDE	**360**-¾	337	(400-¾)
	23L[3]		ABC	**460**-¾	438	(500-¾)
			DE	**460**-1	438	(500-1)
	14R		ABCDE	**300**-1¼	278	(300-1¼)
	23R		ABC	**460**-1¼	439	(500-1¼)
			DE	**460**-1½	439	(500-1½)
PAR SIDESTEP[8]	32R		AB	**360**-1¼	339	(400-1¼)
			C	**360**-1½	339	(400-1½)
			DE	**360**-2	339	(400-2)
	14L		AB	**360**-1¼	340	(400-1¼)
			C	**360**-1½	340	(400-1½)
			DE	**360**-2	340	(400-2)
	5L		ABC	**420**-1½	399	(400-1½)
			DE	**420**-2	399	(400-2)
	23L		ABC	**460**-1½	438	(500-1½)
			DE	**460**-2	438	(500-2)
	23R		ABC	**460**-1½	439	(500-1½)
			DE	**460**-2	439	(500-2)
PAR W/O GS SIDESTEP[8]	5L		AB	**420**-1¼	399	(400-1¼)
			C	**420**-1½	399	(400-1½)
			DE	**420**-2	399	(400-2)
	32R		AB	**360**-1¼	339	(400-1¼)
			C	**360**-1½	339	(400-1½)
			DE	**360**-2	339	(400-2)
	14L		AB	**360**-1¼	340	(400-1¼)
			C	**360**-1½	340	(400-1½)
			DE	**360**-2	340	(400-2)
	23L		AB	**460**-1¼	438	(500-1¼)
			C	**460**-1½	438	(500-1½)
			DE	**460**-2	438	(500-2)
	23R		AB	**460**-1¼	439	(500-1¼)
			C	**460**-1½	439	(500-1½)
			DE	**460**-2	439	(500-2)

OCEANA NAS (KNTU), (Continued)

	RWY	GS/TCH/RPI	CAT	DH/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	5R[5]		AB	**420**-½	400	(400-½)
			CD	**420**-¾	400	(400-¾)
			E	**420**-1	400	(400-1)
	5L		ABC	**400**-1	379	(400-1)
			DE	**400**-1¼	379	(400-1¼)
	32L[6]		AB	**440**-½	417	(500-½)
			CD	**440**-¾	417	(500-¾)
			E	**440**-1	417	(500-1)
	23L[7]		AB	**460**-½	438	(500-½)
			C	**460**-¾	438	(500-¾)
			DE	**460**-1	438	(500-1)
	14R		AB	**460**-1	438	(500-1)
			C	**460**-1¼	438	(500-1¼)
			DE	**460**-1½	438	(500-1½)
	14L		AB	**460**-1	440	(500-1)
			C	**460**-1¼	440	(500-1¼)
			DE	**460**-1½	440	(500-1½)
	23R		AB	**460**-1	439	(500-1)
			C	**460**-1¼	439	(500-1¼)
			DE	**460**-1½	439	(500-1½)
	32R		AB	**440**-1	419	(500-1)
			CD	**440**-1¼	419	(500-1¼)
			E	**440**-1½	419	(500-1½)
CIR	All Rwy		AB	**480**-1	457	(500-1)
ASR			C	**480**-1½	457	(500-1½)
			D	**580**-2	557	(600-2)
			E	**620**-2	597	(600-2)
CIR	All Rwy		ABC	**480**-1¾	457	(500-1¾)
PAR			D	**580**-2	557	(600-2)
			E	**620**-2¼	597	(600-2¼)
CIR	All Rwy		AB	**480**-1¼	457	(500-1¼)
PAR W/O GS			C	**480**-1½	457	(500-1½)
			D	**580**-2	558	(600-2)
			E	**620**-2	598	(600-2)

[1]When ALS inop, increase vis CAT ABCDE to ½ mile. [2]When ALS inop, increase vis CAT ABCD to 1¼ miles, CAT E to 1½ miles. [3]When ALS inop, increase CAT ABC to 1¼ miles, CAT DE to 1½ miles. [4]When ALS inop, increase vis CAT ABCDE to 1¼ miles. [5]When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles, CAT E to 1½ miles. [6]When ALS inop, increase vis CAT AB to 1 mile, CAT CD to 1¼ miles, CAT E to 1½ miles. [7]When ALS inop, increase vis CAT ABC to 1 mile, CAT D to 1¼ miles, CAT E to 1½ miles. [8]No-NOTAM preventive maintenance TUE 1030Z-1430Z++.

PATUXENT RIVER NAS (KNHK), (TRAPNELL FLD), MD (09267 USN) ELEV 39

RADAR - (E) 120.05 121.0 135.025 250.3 281.8 301.2 305.2 318.8 348.0 362.6

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[1]	6[2]	3.0°/46/971	ABCDE	**139**-¼	100	(100-¼)
	24	3.0°/43/805	ABCDE	**120**-½	100	(100-½)
	14	3.0°/37/735	ABCDE	**127**-½	100	(100-½)
	32	3.0°/48/892	ABCDE	**268**-1	250	(300-1)
PAR W/O GS	6[4]		ABCD	**360**-½	321	(400-½)
			E	**360**-¾	321	(400-¾)
	14		ABCDE	**340**-1¼	313	(400-1¼)
	24		ABCDE	**320**-1¼	300	(400-1¼)
	32		ABCDE	**340**-1¼	322	(400-1¼)
ASR	14		ABC	**380**-1	353	(400-1)
			DE	**380**-1¼	353	(400-1¼)
	32		ABC	**400**-1	382	(400-1)
			DE	**400**-1¼	382	(400-1¼)
	6[3]		AB	**500**-½	461	(500-½)
			C	**500**-¾	461	(500-¾)
			D	**500**-1	461	(500-1)
			E	**500**-1¼	461	(500-1¼)
	24		AB	**440**-1	420	(500-1)
			CD	**440**-1¼	420	(500-1¼)
			E	**440**-1½	420	(500-1½)
CIR[5]	6-24, 14-32		A	**540**-1	501	(600-1)
			B	**560**-1	521	(600-1)
			C	**560**-1½	521	(600-1½)
			D	**600**-2	561	(600-2)
			E	**640**-2¼	601	(700-2¼)

[1]PAR No-NOTAM preventive maint period Wed 1300-1700Z++. [2]When ALS inop, increase Cat ABCDE vis to ½ mile. [3]When ALS inop, increase Cat AB vis to 1 mile, Cat C vis to 1¼ miles, Cat D vis to 1½ miles, Cat E vis to 1¾ miles. [4]When ALS inop, increase vis Cat ABCD to 1 mile, Cat E vis to 1¼ miles. [5]When circling from PAR W/O GS Rwy 14, 24, and 32, increase vis Cat AB to 1¼ miles.

QUANTICO MCAF (KNYG), (TURNER FIELD) VA (09295 USN) ELEV 11

RADAR[1] - 120.925 351.95 353.65 363.15

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
PAR[23]	2	3.0°/35/670	ABCD	**262**-1	252	(300-1)
PAR W/O GS[2]	2		ABCD	**400**-1¼	390	(400-1¼)
ASR[2]	2		AB	**560**-1	550	(600-1)
			C	**560**-1½	550	(600-1½)
			D	**560**-1¾	550	(600-1¾)
CIR PAR or PAR W/O GS[4]	2		A	**500**-1¼	490	(500-1¼)
			B	**540**-1¼	530	(600-1¼)
			C	**540**-1½	530	(600-1½)
			D	**700**-2¼	690	(700-2¼)
CIR[4]	2		AB	**560**-1	550	(600-1)
			C	**560**-1½	550	(600-1½)
			D	**700**-2¼	690	(700-2¼)

[1]GCA avbl daily during published field opr hr. Ctc twr for freq asgn. [2]Procedure NA at night when VGSI inop. [3]PAR military use only in other than VFR. [3]Circling not authorized W of Rwy 2-20.

INSTRUCTION APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME	TAKE-OFF MINIMUMS

ABINGDON, VA

VIRGINIA HIGHLANDS

TAKE-OFF MINIMUMS: **Rwys 6, 24**, 300-1.

DEPARTURE PROCEDURE: Climb straight ahead to 5000 when departing NE, or 4000 when departing SW, before proceeding on course.

ANDREWS AFB/NAF (KADW)

CAMP SPRINGS, MD. 09127

TAKE-OFF OBSTACLES: **Rwy 1L,** trees 2972' to 3085' from DER, 765' to 906' right of centerline, 93' AGL/355' MSL. **Rwy 1R,** trees 1512' from DER, 856' right of centerline, 74' AGL/336' MSL; trees 2254' from DER, 645' left of centerline, 93' AGL/ 355' MSL; trees 2629' from DER, 1095' left of centerline, 93' AGL/355' MSL; trees 2882' from DER, 364' left of centerline, 104' AGL/ 362' MSL. **Rwy 19L,** terrain 267' from DER, 580' left of centerline, 261' MSL; trees 2650' to 2874' from DER, 946' to 1113' right of centerline, 91' AGL/334' MSL. **Rwy 19R,** trees 2650' to 2873' from DER, 887' to 1054' left of centerline, 91' AGL/334' MSL; tower 4630' from DER, 1664' right of centerline, 108' AGL/377' MSL.

NAME	TAKE-OFF MINIMUMS

ANNAPOLIS, MD

LEE

TAKE-OFF MINIMUMS: **Rwy 30,** 300-1 or std. with a min. climb of 410' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 12,** climb runway heading to 700 before proceeding on course. **Rwy 30,** climb runway heading to 1000 before proceeding right on course. Climb runway heading to 700 before proceeding left on course.

NOTE: **Rwy 12,** cross departure end of runway at or above 35' AGL/66' MSL. **Rwy 30,** trees, 1433' from departure end of runway, 85' left of centerline, 100' AGL/139' MSL. Cross departure end of runway at or above 35' AGL/66' MSL.

BALTIMORE, MD

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL

TAKE-OFF MINIMUMS: **Rwy 4,** 300-1½ or std. w/ min. climb of 210' per NM to 500.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 044° to 800 before proceeding on course. **Rwy 28,** climb heading 285° to 900 before proceeding on course. **Rwy 33L,** climb heading 320° to 2000 before proceeding on course. **Rwy 33R,** climb heading 005° to 1900 before proceeding on course.

NOTE: **Rwy 4,** rod on lighted pole 1921' from departure end of runway, 329' right of centerline, 58' AGL/197' MSL. Light on pole 2177' from departure end of runway, 294' left of centerline, 58' AGL/197' MSL. Light on pole 1755' from departure end of runway, 482' right of centerline, 47' AGL/186' MSL. Tree 2370' from departure end of runway, 481' right of centerline, 60' AGL/199' MSL. Tank 6635' from departure end of runway, 2265' right of centerline, 122' AGL/316' MSL. Tank 7534' from departure end of runway, 2274' left of centerline, 173' AGL/338' MSL. **Rwy 10,** building 52' from departure end of runway, 319' left of centerline, 13' AGL/133' MSL. **Rwy 15L,** multiple trees beginning 648' from departure end of runway, 617' left of centerline, up to 68' AGL/167' MSL. Light on pole 921' from departure end of runway, 618' left of centerline, 62' AGL/161' MSL. **Rwy 15R,** multiple trees beginning 1144' from departure end of runway, 740' right of centerline, up to 53' AGL/172' MSL. **Rwy 22,** terrain beginning 111' from departure end of runway, 29' right of centerline, up to 171' AGL. Terrain 365' from departure end of runway, 137' left of centerline, 158' MSL. **Rwy 28,** tree 1392' from departure end of runway, 736' left of centerline, 77' AGL/176' MSL. **Rwy 33L,** building 4693' from departure end of runway, 874' right of centerline, 127' AGL/266' MSL. Tree 2250' from departure end of runway, 843' right of centerline, 66' AGL/205' MSL. Microwave antenna on building, 4725' from departure end of runway, 907' right of centerline, 126' AGL/265' MSL. Fence 203' from departure end of runway, 517' right of centerline, 9' AGL/140' MSL. **Rwy 33R,** numerous trees beginning 2925' from departure end of runway, 321' left of centerline, up to 70' AGL/289' MSL. Numerous trees beginning 975' from departure end of runway, 116' right of centerline, up to 63' AGL/262' MSL. Light on pole 2384' from departure end of runway, 837' right of centerline, 55' AGL/254' MSL. Building 998' from departure end of runway, 654' left of centerline, 24' AGL/183' MSL. Light on pole 3869' from departure end of runway, 603' left of centerline, 72' AGL/251' MSL. Light on pole 2736' from departure end of runway, 247' right of centerline, 17' AGL/216' MSL. Pole 3781' from departure end of runway, 370' right of centerline, 40' AGL/242' MSL. Signal 2453' from departure end of runway, 904' left of centerline, 45' AGL/204' MSL.

BALTIMORE, MD (CON'T)

MARTIN STATE

TAKE-OFF MINIMUMS: **Rwy 15,** 800-2 or std. with a min. climb of 300' per NM to 1000. **Rwy 33**, 1300-2 or std. with a min. climb of 340' per NM to 1700'.

DEPARTURE PROCEDURE: **Rwy 15**, climb runway heading to 1000 before proceeding on course; or when directed by ATC, climbing right turn heading 190° to 1000 before proceeding on course.

NOTE: **Rwy 15,** trees 1960' from departure end of runway 684' left of centerline, 78' AGL/88' MSL, trees 3395' from departure end of runway, 585' left of centerline, 92' AGL/102' MSL. **Rwy 33,** pole 1553' from departure end of runway, across centerline, 68' AGL/90' MSL. Trees 2342' from departure end of runway, across centerline 86' AGL/108' MSL.

BLACKSBURG, VA

VIRGINIA TECH/MONTGOMERY EXECUTIVE (BCB)

AMDT 4 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** 400-1¼ or std. w/ min. climb of 563' per NM to 2700.

DEPARTURE PROCEDURE: **Rwy 12,** climbing right turn direct PSK VORTAC to 3500 before proceeding on course. **Rwy 30,** climbing left turn direct PSK VORTAC to 4100 before proceeding on course.

NOTE: **Rwy 12,** bushes and trees beginning 275' from departure end of runway, 154' left of centerline, up to 100' AGL/2239' MSL. Trees beginning 5108' from departure end of runway, 1363' left of centerline, up to 100' AGL/2499' MSL. Trees beginning 3165' from departure end of runway, 1324' right of centerline up to 100' AGL/2279' MSL. **Rwy 30,** trees beginning 90' from departure end of runway, 461' left of centerline, up to 46' AGL/2140' MSL. Fence and obstruction light pole beginning 546' from departure end of runway, 161' left of centerline, up to 12' AGL/2139' MSL. Vehicle on road beginning 567' from departure end of runway, 310' left of centerline, 24' AGL/2137' MSL. Trees beginning 2080' from departure end of runway, 788' left of centerline, up to 100' AGL/2201' MSL. Fence, 861' from departure end of runway, 52' right of centerline, up to 12' AGL/2135' MSL. Trees beginning 539' from departure end of runway, 326' right of centerline, up to 40' AGL/2153' MSL. Trees beginning 1328' from departure end of runway, 117' right of centerline, up to 100' AGL/2182' MSL terrain beginning 330' from departure end of runway, 366' right of centerline, up to 2138' MSL pole and antenna beginning 1149' from departure end of runway, 391' right of centerline, up to 40' AGL/2151' MSL.

BLACKSTONE, VA

ALLEN C PERKINSON BLACKSTONE AAF

TAKE-OFF MINIMUMS: **Rwy 1,** 1000-2 or std. with a min. climb of 280' per NM to 1700. **Rwy 4,** 1000-2 or std. with a min. climb of 220' per NM to 1700. **Rwy 19,** NA.

DEPARTURE PROCEDURE: **Rwy 1,** climb heading 010° to 1700 before proceeding on course. **Rwy 4,** climb heading 039°to 1700 before proceeding on course. **Rwy 22,** climb heading 208° to 900 before proceeding on course. **Rwy 22,** climb heading 208° to 900 before proceeding on course.

NOTE: **Rwy 4,** 50' AGL tree, 150' from departure end of runway, 450' right of centerline. **Rwy 22,** 66' AGL tree, 175' from departure end of runway, 450' left of centerline. Do not fly over ammunition dump 1.1 NM SW of Rwy 4.

BRIDGEWATER, VA

BRIDGEWATER AIRPARK

TAKE-OFF MINIMUMS: **Rwy 15**, 700-1. **Rwy 33**, 700-2.

DEPARTURE PROCEDURE: **All aircraft** climb in VBW holding pattern (SW, right turns, 035° inbound) to 4000 before proceeding on course.

BROOKNEAL, VA

BROOKNEAL/CAMPBELL COUNTY

NOTE: **Rwy 6,** multiple trees beginning 569' from departure end of runway, 252' right of centerline, up to 100' AGL/689' MSL. **Rwy 24,** multiple trees beginning 334' from departure end of runway, 286' right of centerline, up to 100' AGL/679' MSL. Multiple trees beginning 1377' from departure end of runway, 850' left of centerline, up to 100' AGL/719' MSL.

CAMBRIDGE, MD

CAMBRIDGE-DORCHESTER

TAKE-OFF MINIMUMS: **Rwy 34**, 300-1.

CAMP PEARY LNDG STRIP (KW94)

WILLIAMSBURG, VA 08213

TAKE-OFF OBSTACLES: **Rwy 5:** trees and multiple transmission lines 120' from DER, 184' left of centerline up to 95' AGL/126' MSL. Trees and multiple transmission lines 162' from DER, 257' right of centerline up to 100' AGL/132' MSL. **Rwy 23:** trees and multiple transmission lines 1891' from DER, 69' left of centerline up to 95' AGL/136' MSL. Multiple trees and transmission lines 537' from DER, 437' right of centerline up to 110' AGL/151' MSL.

CHARLOTTESVILLE, VA

CHARLOTTESVILLE-ALBEMARLE (CHO)

AMDT 9 09295 (FAA)

TAKE-OFF MINIMUMS: **Rwy 3,** std. w/ min. climb of 323' per NM to 1500, or 2200-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 3,** climb via heading 030° to 1500 then climbing right turn to 4000 direct GVE VORTAC before proceeding on course, or for climb in visual conditions: cross Charlottesville-Albemarle airport at or above 2700 before proceeding on course. **Rwy 21,** climb via heading 210° to 1400, then climbing left turn to 4000 direct GVE VORTAC before proceeding on course.

NOTE: **Rwy 3,** pole 97' from DER, 476' right of centerline, 27' AGL/627' MSL. Trees beginning 836' from DER, 597' right of centerline, up to 100' AGL/1216' MSL. Tower 2.3 NM from DER, 3443' right of centerline, 107' AGL/1167' MSL. Terrain beginning 2.2 NM from DER, 3183' right of centerline, up to 1116' MSL.

CHASE CITY, VA

CHASE CITY MUNI

NOTE: **Rwy 18,** trees beginning 191' from departure end of runway, 116' left of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 327' from departure end of runway, 133' right of centerline, up to 100' AGL/599' MSL. **Rwy 36,** trees beginning 164' from departure end of runway, 154' right of centerline, up to 100' AGL/649' MSL. Trees beginning 470' from departure end of runway, 124' left of centerline, up to 100' AGL/649' MSL.

CHURCHVILLE, MD

HARFORD COUNTY

TAKE-OFF MINIMUMS: **Rwy 28,** 300-1 or std. with a min. climb of 400' per NM to 600.

NOTE: **Rwy 28,** 100' terrain/trees 1150' from departure end of runway.

CLARKSVILLE, VA

LAKE COUNTRY RGNL

TAKE-OFF MINIMUMS: **Rwy 4,** 600-1 or std. with a min. climb of 260' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 22,** climb runway heading to 1900 before turning.

CLINTON, MD

WASHINGTON EXECUTIVE/HYDE FIELD (W32)

ORIG 08045 (FAA)

NOTES: **Rwy 5,** Vehicle on road beginning 20' from departure end of runway, on centerline, up to 15' AGL/261' MSL. **Rwy 23,** Vehicle on road 23' from departure end of runway, 329' left of centerline, 15' AGL/260' MSL.

COLLEGE PARK, MD

COLLEGE PARK (CGS)
AMDT 3B 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 15,** 400-2¼ or std. w/ min. climb of 486' per NM to 600. **Rwy 33,** 400-2½ or std. w/ min. climb of 433' per NM to 600.

DEPARTURE PROCEDURE: **Rwy 15,** climb heading 149° to 600 before proceeding on course. **Rwy 33,** climb heading 329° to 600 before proceeding on course.

NOTE: **Rwy 15,** trees beginning 2799' from departure end of runway, 570' left of centerline, up to 100' AGL/259' MSL. Antenna 1.1 NM from departure end of runway, 149' left of centerline, 167' AGL/270' MSL. **Rwy 33,** terrain beginning 1 NM from departure end of runway, 3700' right of centerline to 3700' left of centerline, up to 439' MSL. Building 3811' from departure end of runway, 467' right of centerline, 184' AGL/254' MSL. Tower 1.9 NM from departure end of runway, 1447' left of centerline, 255' AGL/405' MSL.

CRISFIELD, MD

CRISFIELD MUNI

TAKE-OFF MINIMUMS: **Rwys 6, 24,** NA-obstacles

DEPARTURE PROCEDURE: **Rwy 14,** climb via heading 142° to 900 before proceeding on course. **Rwy 32,** climb via heading 322° to 900 before proceeding on course.

CULPEPER, VA

CULPEPER RGNL (CJR)
ORIG 07354 (FAA)

DEPARTURE PROCEDURE: **Rwy 22,** climb heading 218° to 1000 before turning right.

NOTE: **Rwy 4,** tree 79' from departure end of runway, 418' left of centerline 86' AGL/337' MSL. Vehicle on road 207' from departure end of runway, 367' left of centerline, 15' AGL/330' MSL. Tree 3396' from departure end of runway, 514' right of centerline, 91' AGL/410' MSL. **Rwy 22,** tree 128' from departure end of runway, 332' left of centerline, 25' AGL/334' MSL. Multiple trees beginning 272' from departure end of runway, 179' right of centerline up to 22' AGL/341' MSL. Pole 1480' from departure end of runway, 68' left of centerline, 27' AGL/356' MSL.

CUMBERLAND, MD

GREATER CUMBERLAND RGNL

TAKE-OFF MINIMUMS: **Rwy 5,** 1700-2 or std. with a min. climb of 300' per NM to 3400. **Rwy 11,** 1600-2 or std. with a min. climb of 520' per NM to 3400. **Rwy 23,** 1200-2 or std. with a min. climb of 660' per NM to 3400. **Rwy 29,** NA.

DEPARTURE PROCEDURE: **Rwys 5,11,** climb runway heading to 3400 before proceeding on course. **Rwy 23,** climbing left turn to intercept 177° course from CBE NDB to 3400 before proceeding on course.

DANVILLE, VA

DANVILLE RGNL

TAKE-OFF MINIMUMS: **Rwys 2, 31,** 300-1 or std. with a min. climb of 240' per NM to 1000.

DAVISON AAF (KDAA)

FORT BELVOIR, VA

. . . . . .Rwy 32, 300-1*

* Or standard with minimum climb of 380/NM to 500.

TAKE-OFF OBSTACLES: Rwy 32, 63' AGL tree 865' from departure end of rwy, 82' right of centerline.

DOVER AFB (KDOV)

DOVER, DE 09155

TAKE-OFF OBSTACLES: **Rwy 1,** possible aircraft/vehicles at DER hammerhead just left of rwy centerline, up to 65' AGL/91' MSL. **Rwy 19,** possible aircraft/vehicles at DER hammerhead just right of rwy centerline, up to 65' AGL/91' MSL. Rwy 32, multiple C-5s parked on ramp beginning 1535' thru 2780' from DER, 1010' left of centerline, up to 65' AGL/98' MSL. Bldg 3900' from DER, 760' left of centerline, 88' AGL/119' MSL. Possible taxiing aircraft/vehicles on taxilane Alpha beginning 565' thru 2780' from DER, 750' left of centerline, up to 65' AGL/98' MSL. Possible large aircraft 2800' from DER, on taxiway Golf just left of centerline, up to 65' AGL/92' MSL.

DOVER/CHESWOLD, DE

DELAWARE AIRPARK

NOTE: **Rwy 9,** multiple trees beginning 26' from departure end of runway, 50' left of centerline, up to 100' AGL/149' MSL. Pole line 1151' from departure end of runway, 36' right of centerline, 50' AGL/99' MSL. Multiple trees beginning 815' from departure end of runway, 505' right of centerline, up to 100' AGL/154' MSL. **Rwy 27,** multiple trees beginning 231' from departure end of runway, 85' left of centerline, up to 100' AGL/169' MSL. Multiple trees beginning 829' from departure end of runway, 43' right of centerline, up to 100' AGL/164' MSL.

DUBLIN, VA

NEW RIVER VALLEY (PSK)
AMDT 2 09071 (FAA)

TAKE-OFF MINIMUMS: **Rwy 24,** 200-1½ or std. w/ min. climb of 310' per NM to 2400.

DEPARTURE PROCEDURE: **Rwy 6**, climbing right turn heading 150° to intercept PSK VORTAC R-120 outbound to 5200 before proceeding on course. **Rwy 24**, climb heading 238° to 4000 before proceeding on course.

NOTE: **Rwy 6,** tree 321' from DER, 493' left of centerline, 100' AGL/2112' MSL. Terrain 122' from DER, 460' left of centerline, up to 2105' MSL. **Rwy 24,** pole 1223' from DER, 671' right of centerline, 42' AGL/2161' MSL. Pole 669' from DER, 558' right of centerline, 18' AGL/2137' MSL. Pole 4851' from DER, 1170' left of centerline, 32' AGL/2231' MSL. Tower 5078' from DER 1017' left of centerline, 101' AGL/2300' MSL. Trees 226' from DER, 271' left of centerline, up to 103' AGL/2302' MSL. Terrain 68' from DER, 281' right of centerline, up to 2116' MSL.

EASTON, MD

EASTON/NEWNAM FIELD

TAKE-OFF MINIMUMS: **Rwy 22,** 300-2 or std. w/ climb of 241' per NM to 500.

NOTE: **Rwy 4,** vehicles on roads beginning 199' from departure end of runway, 350' right of centerline, up to 15' AGL/102' MSL. Multiple poles beginning 434' from departure end of runway, 88' right of centerline, up to 31' AGL/100' MSL. Multiple trees beginning 1485' from departure end of runway, 46' right of centerline, up to 64' AGL/133' MSL. Tree 1509' from departure end of runway, 38' left of centerline, 47' AGL/116' MSL. **Rwy 15,** fence 2' from departure end of runway, 411' left of centerline, 8' AGL/57' MSL. Multiple poles beginning 721' from departure end of runway, 183' left of centerline, up to 64' AGL/123' MSL. Multiple poles beginning 828' from departure end of runway, 514' right of centerline, up to 26' AGL/85' MSL. Multiple trees beginning 862' from departure end of runway, 275' left of centerline, up to 89' AGL/148' MSL. Multiple trees beginning 1357' from departure end of runway, 238' right of centerline, up to 94' AGL/153' MSL. **Rwy 22,** tree 1251' from departure end of runway, 786' right of centerline, 56' AGL/95' MSL. Multiple trees beginning 1323' from departure end of runway, 759' left of centerline, up to 90' AGL/129' MSL. Tower 1.6 NM from departure end of runway, 2373' left of centerline, 276' AGL/291' MSL. **Rwy 33,** multiple trees 10' from departure end of runway, 19' right of centerline, up to 139' AGL/158' MSL. Vehicle on road 352' from departure end of runway, 405' right of centerline, 15' AGL/59' MSL. Pole 888' from departure end of runway, 409' left of centerline, 19' AGL/58' MSL. Multiple trees beginning 1153' from departure end of runway, 245' left of centerline, up to 99' AGL/118' MSL.

ELKTON, MD

CECIL COUNTY

TAKE-OFF MINIMUMS: NOTE: **Rwy 13,** cross departure end of runway at or above 27' AGL/89' MSL. **Rwy 31,** 300-1½ or std. w/ min. climb of 290' per NM to 400.

DEPARTURE PROCEDURE: **Rwy 31,** climb heading 308° to 900 before turning left.

NOTE: **Rwy 13,** trees 185' from departure end of runway, 110' right of centerline, 50' AGL/113' MSL. Trees 325' from departure end of runway, 125' left of centerline, 75' AGL/138' MSL. **Rwy 31,** trees, 1350' from departure end of runway, on centerline, 115' AGL/221' MSL. Trees beginning 1050' from departure end of runway, 781' left to 781' right of centerline, up to 100' AGL/309' MSL.

EMPORIA, VA

EMPORIA-GREENSVILLE RGNL (EMV)

ORIG 09155 (FAA)

NOTE: **Rwy 15,** vehicle on roadway 21' from DER, 291' left of centerline, up to 15' AGL/124' MSL. Trees beginning 56' from DER, 245' right of centerline, up to 60' AGL/169' MSL. Trees beginning 98' from DER, 231' left of centerline, up to 60' AGL/169' MSL. Trees beginning 1387' from DER, 387' left of centerline, up to 60' AGL/149' MSL. **Rwy 33,** trees beginning 115' from DER, 276' right of centerline, up to 60' AGL/189' MSL. Trees beginning 138' from DER, 321' left of centerline, up to 60' AGL/189' MSL. Vehicle on roadway, 163' from DER, 524' right of centerline, up to 15' AGL/144' MSL. Vehicle on roadway, 222' from DER, 534' left of centerline, up to 17' AGL/146' MSL.

FARMVILLE, VA

FARMVILLE RGNL (FVX)

ORIG 07354 (FAA)

NOTE: **Rwy 3,** tree 1335' from departure end of runway, 277' right of centerline, 59' AGL/476' MSL. **Rwy 21,** vehicle on road 18' from departure end of runway, 495' left of centerline, 15' AGL/425' MSL. Tree 675' from departure end of runway, 315' right of centerline, 42' AGL/452' MSL.

FELKER AAF (KFAF),

FORT EUSTIS, VA 08297

Rwy 14, 32 standard.

TAKE-OFF OBSTACLES: **Rwy 14:** Tree 3133' from DER, 167' left of centerline, 103' AGL/112' MSL. **Rwy 32:** Crane 2938' from DER, 941' left of centerline, 114' AGL/124' MSL. Trees beginning 2931' from DER, 186' left of centerline up to 74' AGL/85' MSL.

FORT MEADE (ODENTON), MD

TIPTON

NOTE: **Rwy 10,** cross departure end of runway at or above 17' AGL/167' MSL. **Rwy 10,** trees 1052' right of departure end of runway, 88' AGL/238' MSL.

FRANKLIN, VA

FRANKLIN MUNI-JOHN BEVERLY ROSE (FKN)

AMDT 2 09071 (FAA)

NOTE: **Rwy 9,** trees beginning 1977' from DER, 349' left of centerline, up to 100' AGL/139' MSL. Trees beginning 1287' from DER, 236' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 533' from DER, 604' right of centerline, 15' AGL/59' MSL. **Rwy 27,** trees beginning 100' from DER, 444' left of centerline, up to 100' AGL/134' MSL. Trees beginning 520' from DER, 520' right of centerline, up to 100' AGL/134' MSL. Vehicle on road 308' from DER, left to right of centerline, 15' AGL/44' MSL.

FREDERICK, MD

FREDERICK MUNI

TAKE-OFF MINIMUMS: **Rwy 12**, 500-3 or std. with a min. climb of 270' per NM to 1000.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 2000 before proceeding on course. **Rwy 30,** climbing right turn to intercept FDK VOR R-010 to 2400 before proceeding on course.

FREDERICKSBURG, VA

SHANNON

TAKE-OFF MINIMUMS: **Rwy 24,** 800-3 or std. with a min. climb of 290' per NM to 800.

DEPARTURE PROCEDURE: **Rwy 24,** climb to 800 via runway heading before proceeding on course.

NOTE: 744' tower 2.1 NM from departure end of Rwy 24.

FRIENDLY, MD

POTOMAC AIRFIELD

TAKE-OFF MINIMUMS: **Rwys 6,24,** 300-1.

NOTE: **Rwy 6,** 50' AGL trees 300' left of departure end of runway. 75' AGL trees 320' right of departure end of runway. **Rwy 24,** 80' AGL trees 200' right of departure end of runway. 75' AGL trees 200' left of departure end of runway. 30' AGL hanger 200' from departure end of runway, 190' right of centerline.

FRONT ROYAL, VA

FRONTROYAL-WARREN COUNTY

TAKE-OFF MINIMUMS: **Rwy 9,** std. w/ min. climb of 409' per NM to 1100, or 2300-3 for climb in visual conditions. **Rwy 27,** NA-obstacles.

DEPARTURE PROCEDURE: **Rwy 9,** climbing left turn via MRB R-216 to MRB VORTAC before proceeding on course, do not exceed 180 knots until MRB VORTAC; or for climb in visual conditions: cross Front Royal-Warren County Airport at or above 2900 MSL before proceeding on course.

NOTE: **Rwy 9,** multiple trees beginning 148' from departure end of runway, 99' right of centerline, up to 100' AGL/939' MSL. Multiple trees beginning 182' from departure end of runway, 189' left of centerline, up to 100' AGL/854' MSL.

GAITHERSBURG, MD

MONTGOMERY COUNTY AIRPARK

TAKE-OFF MINIMUMS: NOTE: **Rwy 14,** 62' AGL trees 197' right of centerline. **Rwy 32,** 63' AGL trees 335' left of centerline.

GALAX-HILLSVILLE, VA

TWIN COUNTY

TAKE-OFF MINIMUMS: **Rwy 19,** 300-1 or std. with a min. climb of 240' per NM until passing 3000. **Rwy 1,** 300-1 or std. with a min. climb of 310' per NM until passing 3000.

GEORGETOWN, DE

SUSSEX COUNTY

TAKE-OFF MINIMUMS: **Rwys 4, 13, 22, 31,** 300-1.

GRUNDY, VA

GRUNDY MUNI

TAKE-OFF MINIMUMS: **Rwy 22,** 300-2 or std. with a min. climb of 240' per NM to 2700.

HAGERSTOWN, MD

HAGERSTOWN RGNL -RICHARD A. HENSON FIELD

TAKE-OFF MINIMUMS: **Rwy 2**, 300-1.

DEPARTURE PROCEDURE: **Rwy 9**, climbing left turn to 2500 via 040° heading to intercept the HGR R-084 before departing as cleared. **Rwys 2, 20**, climb to 2000 before turning eastbound.

HOT SPRINGS, VA

INGALLS FIELD

TAKE-OFF MINIMUMS: **Rwy 7,** 500-1 or std. with a min. climb of 320' per NM to 4400. **Rwy 25**, 600-1 or std. with a min. climb of 390' per NM to 5000.

DEPARTURE PROCEDURE: **Rwy 7,** climb runway heading to 4400 before proceeding on course. **Rwy 25,** climb runway heading to 5000 before proceeding on course.

INDIAN HEAD, MD

MARYLAND

TAKE-OFF MINIMUMS: **Rwy 36,** 300-1¼ or std. w/ min. climb of 360' per NM to 600.

NOTE: **Rwy 18,** trees abeam departure end of runway, 125' left of centerline, up to 100' AGL/256' MSL. Trees 269' from departure end of runway, on centerline, 100' AGL/256' MSL. Trees abeam departure end of runway, 125' right of centerline, up to 100' AGL/256' MSL. Tower 6170' from departure end of runway, 620' right of centerline, 190' AGL/384' MSL. **Rwy 36,** trees 258' from departure end of runway, 309' left of centerline, up to 100' AGL/271' MSL. Tree 567' from departure end of runway, 125' left of centerline, 60' AGL/230' MSL. Rising terrain beginning 73' from departure end of runway, 64' right of centerline, 180' MSL.

JONESVILLE, VA

LEE COUNTY

TAKE-OFF MINIMUMS: **Rwy 7,** std. w/ min. climb of 467' per NM to 3800, or 1900-3 for climb in visual conditions. **Rwy 25,** std. w/ min. climb of 442' per NM to 3500, or 1900-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwys 7, 25,** for climb in visual conditions cross Lee County Airport at or above 3200 before proceeding on course.

NOTE: **Rwy 7,** terrain 116' from departure end of runway, 72' right of centerline, 1439' MSL. Terrain 691' from departure end of runway, 53' right of centerline, 1459' MSL. Terrain 267' from departure end of runway, 190' left of centerline, 1439' MSL. Terrain 479' from departure end of runway, 68' left of centerline, 1459' MSL.

LANGLEY AFB (KLFI)
HAMPTON, VA
..... Orig 07354
..... **Rwy 8**, 500-3*
* Or standard with minimum climb of 240 ft/NM to 700.
NOTE: Rwy 26, cross DER at or above 10' AGL/18' MSL.
TAKE-OFF OBSTACLES: **Rwy 8**, Boat 2261' from DER, 779' left of centerline, 60' AGL/80' MSL. Boat 2500' from DER, 59' left of centerline, 60' AGL/70' MSL. Vehicle on road 1051' from DER, 702' right of centerline, 15' AGL/43' MSL. Boat 2841' from DER, 641' right of centerline, 60' AGL/80' MSL. Multiple towers 2.0 NM from DER, 1.7 NM right of centerline, 503' AGL/511' MSL. Rwy 26, Tree 4050' from DER, 685' left of centerline, 100' AGL/120' MSL. Tree 4840' from DER, 687' left of centerline,100' AGL/136' MSL. Tree 4044' from DER, 31' left of centerline, 101' AGL/113' MSL. Tree 4153' from DER, 342' right of centerline, 101' AGL/114' MSL. Tree 4037' from DER, 623' right of centerline, 101' AGL/110' MSL. Tree 4377' from DER, 435' right of centerline, 100' AGL/121' MSL. Tree 3805' from DER, 1184' right of centerline, 100' AGL/133' MSL.

LAUREL, DE
LAUREL
DEPARTURE PROCEDURE: **Rwys 15, 33,** climb runway heading to 1200 before proceeding on course.

LAWRENCEVILLE, VA
LAWRENCEVILLE/BRUNSWICK MUNI
TAKE-OFF MINIMUMS: **Rwys 6,24,** NA.
NOTE: **Rwy 18,** trees 1654' from departure end of runway, 772' left of centerline, 88' AGL/407' MSL. Trees 200' from departure end of runway, on centerline, 22' AGL/321' MSL. **Rwy 36,** trees 1487' from departure end of runway, 20' left of centerline, 88' AGL/420' MSL. Trees 113' from departure end of runway, 372' right of centerline, 88' AGL/420' MSL.

LEESBURG, VA
LEESBURG EXECUTIVE (JYO)
AMDT 1 09183 (FAA)
DEPARTURE PROCEDURE: **Rwy 35,** climb heading 351° to 900 before proceeding on course.
NOTE: **Rwy 17,** building 167' from DER, 360' left of centerline, 22' AGL/401' MSL. Pole 958' from DER, 373' left of centerline, 32' AGL/421' MSL. Trees beginning 138' from DER, left and right of centerline, up to 100' AGL/464' MSL. **Rwy 35,** terrain 96' from DER, 453' left of centerline, 381' MSL. Tree 1078' from DER, 525' left of centerline, up to 100' AGL/413' MSL. Trees 682' from DER, 333' right of centerline, up to 100' AGL/459' MSL. Pole 638' from DER, 642' right of centerline, 49' AGL/428' MSL.

LEONARDTOWN, MD
ST. MARY'S COUNTY RGNL
NOTES: **Rwy 11,** multiple trees beginning 88' from departure end of runway, 339' left of centerline, up to 80' AGL/205' MSL. Multiple trees beginning 61' from departure end of runway, 193' right of centerline up to 80' AGL/205' MSL. **Rwy 29,** multiple trees beginning 996' from departure end of runway, 227' left of centerline up to 79' AGL/221' MSL. Multiple trees beginning 596' from departure end of runway, 277' right of centerline up to 71' AGL/213' MSL. Multiple towers on buildings beginning 53' from departure end of runway, 400' right of centerline up to 26' AGL/168' MSL. Equipment on building 223' from departure end of runway, 449' right of centerline, 15' AGL/169' MSL. Tower 402' from departure end of runway, 399' right of centerline, 33' AGL/175' MSL. Fence 496' from departure end of runway, 241' right of centerline, 22' AGL/164' MSL.

LOUISA, VA
LOUISA COUNTY/FREEMAN FIELD (LKU)
ORIG 08157 (FAA)
NOTE: **Rwy 9,** trees beginning abeam departure end of runway, 369' right of centerline, up to 100' AGL/589' MSL. Trees beginning 226' from departure end of runway, 541' left of centerline, up to 100' AGL/559' MSL. Trees beginning 1200' from departure end of runway, left and right of centerline, up to 100'AGL/539'MSL. **Rwy 27,** trees beginning abeam departure end of runway, 350' right of centerline, up to 100' AGL/569' MSL. Trees beginning 211' from departure end of runway, 133' right of centerline, up to 100' AGL/569' MSL. Trees beginning 69' from departure end of runway, 513' left of centerline, up to 100' AGL/569' MSL. Trees beginning 586' from departure end of runway, left and right of centerline, up to 100' AGL/549' MSL.

LURAY, VA
LURAY CAVERNS
TAKE-OFF MINIMUMS: **Rwys 4, 22**, 1000-3
DEPARTURE PROCEDURE: Climb visually so as to cross airport at or above 2000, then continue climb to 5000 via LUA 215° bearing before proceeding on course.

LYNCHBURG, VA
FALWELL
TAKE-OFF MINIMUMS: **Rwy 10,** 1100-2½ for climb in visual conditions. **Rwy 28,** NA-obstacle.
DEPARTURE PROCEDURE: **Rwy 10,** for climb in visual conditions: cross Falwell Airport at or above 1900 before proceeding on course.
NOTE: **Rwy 10,** multiple trees 9' from departure end of runway, 87' right of centerline, up to 100' AGL/899' MSL. Multiple power lines 2896' from departure end of runway, 1192' right of centerline, up to 149' AGL/968' MSL.

LYNCHBURG, VA (CON'T)

LYNCHBURG RGNL/PRESTON GLENN FIELD (LYH)
AMDT 8 08073 (FAA)

TAKE-OFF MINIMUMS: **Rwy 17,** 300-2¼ or std. w/ min. climb of 232' per NM to 1500. **Rwy 35,** std. w/ min. climb of 350' per NM to 3000, or 1700-3 for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 036° to 2200 before proceeding on course. **Rwy 17,** climb heading 169° to 1800 before turning right. **Rwy 22,** climb heading 216° to 1800 before turning right. **Rwy 35,** climb heading 349° to 3000 before turning left, or for climb in visual conditions: cross Lynchburg Rgnl/Preston Glenn Field at or above 2500' MSL before proceeding on course.

NOTE: **Rwy 4,** trees beginning 2029' from departure end of runway, 62' right of centerline up to 81' AGL/999' MSL. Trees beginning 1422' from departure end of runway, 3' left of centerline up to 76' AGL/995' MSL. Poles beginning 427' from departure end of runway, 483' right of centerline up to 44' AGL/1044' MSL. Obstruction lights on fence beginning 2' from departure end of runway, 500' right of centerline up to 30' AGL/ 948' MSL. Antenna on building 395' from departure end of runway, 277' right of centerline 15' AGL/954' MSL. Light 606' from departure end of runway, 599' right of centerline, 18' AGL/982' MSL. Building 400' from departure end of runway, 345' right of centerline, 12' AGL/951' MSL. **Rwy 17,** trees beginning 284' from departure end of runway, 77' left of centerline up to 277' AGL/1195' MSL. Trees beginning 265' from departure end of runway, 178' right of centerline up to 57' AGL/969' MSL. Obstruction light on pole 9326' from departure end of runway 333' left of centerline, 270' AGL/1188 MSL. **Rwy 22,** trees beginning 274' from departure end of runway, 245' right of centerline up to 41' AGL/979' MSL. Trees beginning 2616' from departure end of runway, 206' left of centerline up to 41' AGL/ 979' MSL. Poles beginning 2872' from departure end of runway, 603' right of centerline up to 44' AGL/982' MSL. **Rwy 35,** trees beginning 2955' from departure end of runway, 140' right of centerline up to 96' AGL/ 1014' MSL. Trees beginning 722' from departure end of runway, 71' left of centerline up to 119' AGL/1037' MSL. Pole 36' from departure end of runway 98' left of centerline, 25' AGL/ 943' MSL.

MANASSAS, VA

MANASSAS RGNL/HARRY P. DAVIS FIELD

NOTE: **Rwy 16R,** terrain 64' from departure end of runway, 136' right of centerline, 179' MSL. Numerous trees beginning 242' from departure end of runway, 53' right of centerline up to 100' AGL/279' MSL. Vehicle on road 886' from departure end of runway, 463' right of centerline, 15' AGL/214' MSL. Terrain 33' from departure end of runway, 427' left of centerline, 179' MSL. Numerous trees beginning 688' from departure end of runway, 40' left of centerline, up to 100' AGL/279' MSL. **Rwy 16L,** terrain 56' from departure end of runway, 177' left of centerline, 179' MSL. Numerous trees beginning 1911' from departure end of runway, 158' left of centerline, up to 83' AGL/292' MSL. Terrain 87' from departure end of runway, 386' right of centerline, 179' MSL. Numerous trees beginning 2559' from departure end of runway, 29' right of centerline, up to 100' AGL/273' MSL. **Rwy 34R,** sign 70' from departure end of runway, 91' right of centerline, 6' AGL/ 196' MSL. Terrain beginning 23' from departure end of runway, 222' right of centerline, up to 199' MSL. Vehicle on road 198' from departure end of runway, 9' right of centerline, 15' AGL/214' MSL. Numerous trees beginning 1860' from departure end of runway, 828' right of centerline, 70' AGL/280' MSL. Numerous trees beginning 2875' from departure end of runway, 484' left of centerline, up to 27' AGL/266' MSL. **Rwy 34L,** terrain 107' from departure end of runway, 409' right of centerline, 189' MSL. Numerous trees beginning 2802' from departure end of runway, 251' right of centerline, up to 27' AGL/266' MSL. Terrain 76' from departure end of runway, 154' left of centerline, 189' MSL. Vehicle on road 366' from departure end of runway, 19' left of centerline, 15' AGL/204' MSL. Numerous trees beginning 1603' from departure end of runway, 249' left of centerline, up to 43' AGL/252' MSL. Tower 3398' from departure end of runway, 1102' left of centerline, 68' AGL/274' MSL.

MARION/WYTHEVILLE, VA

MOUNTAIN EMPIRE

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1. **Rwy 26,** 800-1.

DEPARTURE PROCEDURE: **Rwy 8**, climb direct to MK NDB then climb to 5300 via 073° bearing before proceeding on course. **Rwy 26**, climb to 5400 via 253° bearing from MK NDB before proceeding on course.

MARTINSVILLE, VA

BLUE RIDGE (MTV)
AMDT 2A 08269 (FAA)

TAKE-OFF MINIMUMS: **Rwy 12,** std. with a min. climb of 240' per NM to 2100. **Rwy 30**, 300-1 or std. with a min. climb of 370' per NM to 1100.

DEPARTURE PROCEDURE: **Rwy 12,** climb direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course. **Rwy 30,** climbing right turn direct BALES LOM, climb in BALES LOM holding pattern (SE, right turns, 304° inbound) to 4000 before proceeding on course.

NOTE: **Rwy 12,** trees 38' from departure end of runway, 380' right of centerline, 82' AGL/941' MSL. Trees 316' from departure end of runway, 320' left of centerline, 56' AGL/956' MSL.

MELFA, VA

ACCOMACK COUNTY

NOTE: **Rwy 3,** multiple trees beginning 41' from departure end of runway, 221' right of centerline, up to 84' AGL/128' MSL. Truck on road 204' from departure end of runway, 231' left of centerline, 15' AGL/61' MSL. Multiple trees beginning 249' from departure end of runway, 14' left of centerline, up to 106' AGL/155' MSL. Truck on road 494' from departure end of runway, 228' left of centerline, 15' AGL/62' MSL. Rod on obstruction light tower 862' from departure end of runway, 402' left of centerline, 55' AGL/99' MSL. **Rwy 21,** multiple trees beginning 27' from departure end of runway, 395' right of centerline, up to 91' AGL/135' MSL. Multiple trees 504' from departure end of runway, 403' left of centerline, up to 110' AGL/144' MSL.

MIDDLETOWN, DE

SUMMIT

TAKE-OFF MINIMUMS: **Rwy 35**, 300-1, or std. with a min. climb of 280' per NM to 400.

MITCHELLVILLE, MD

FREEWAY

TAKE-OFF MINIMUMS: **Rwy 18,** 300-1 or std. with a min. climb of 295' per NM to 500. **Rwy 36,** 300-1 or std. with a min. climb of 500' per NM to 600.

NOTE: **Rwy 18,** trees 328' from departure end of runway, 20' AGL/178' MSL. Trees 838' from departure end of runway, 337' left of centerline, 50' AGL/220' MSL. **Rwy 36,** cross departure end of runway at or above 35' AGL/203' MSL. Road/vehicle, 231' from departure end of runway, 17' AGL/185' MSL. Trees 332' from departure end of runway, 20' AGL/188' MSL. Power poles and lines crossing centerline, 2280' from departure end of runway, 186' AGL/345' MSL.

MONETA, VA

SMITH MOUNTAIN LAKE

TAKE-OFF MINIMUMS: **Rwys 5, 23**, 300-1.

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb straight ahead to 1600 before proceeding on course.

NEWPORT NEWS, VA

NEWPORT NEWS/WILLIAMSBURG INTL

TAKE-OFF MINIMUMS: **Rwy 20**, 300-1¼ or standard with a minimum climb of 255' per NM to 300.

NOTE: **Rwy 2,** bush 295' from departure end of runway, 291' right of centerline 22' AGL/62' MSL. Tree 937' from departure end of runway, 603' left of centerline 81' AGL/131' MSL. Pole 1221' from departure end of runway, 487' right of centerline 31' AGL/81' MSL. Tree 1275' from departure end of runway, 517' left of centerline 79' AGL/132' MSL. Multiple trees beginning 1554' from departure end of runway, 298' left of centerline up to 88' AGL/141' MSL. Tree 1686' from departure end of runway, 428' right of centerline 61' AGL/114' MSL. Tree 1849' from departure end of runway, 598' right of centerline 72' AGL/125' MSL. T-L tower 3351' from departure end of runway, 1008' left of centerline 109' AGL/161 MSL. **Rwy 7,** tree 371' from departure end of runway, 588' left of centerline 36' AGL/73' MSL. T-L tower 4120' from departure end of runway, 1324' right of centerline 93' AGL/116'MSL. T-L tower 5625' from departure end of runway, 1345' left of centerline 133' AGL/191' MSL. **Rwy 20,** bush 96' from departure end of runway, 293' left of centerline 22' AGL/52' MSL. Stack 5977' from departure end of runway, 598' left of centerline 186' AGL/227' MSL. **Rwy 25,** tree 694' from departure end of runway, 549' right of centerline 42' AGL/65' MSL. Tree 1020' from departure end of runway, 703' right of centerline 23' AGL/97' MSL. Tree 1622' from departure end of runway, 529' left of centerline 59' AGL/79' MSL. Tree 2654' from departure end of runway, 335' right of centerline 86' AGL/106' MSL. Tree 3435 from departure end of runway, 1125' right of centerline 116' AGL/139' MSL.

NORFOLK, VA

CHESAPEAKE RGNL

DEPARTURE PROCEDURE: **Rwys 5, 23**, climb runway heading to 500 before proceeding on course.

NOTE: **Rwy 5,** cross departure end of runway at or above 27' AGL/48' MSL. Trees 2200' from departure end of runway, 545' left of centerline, 81' AGL/102' MSL. **Rwy 23,** cross departure end of runway at or above 25' AGL/43'MSL. Trees 1600' from departure end of runway, 710' right of centerline, 62' AGL/82' MSL.

NORFOLK, VA (CON'T)

HAMPTON ROADS EXECUTIVE

TAKE-OFF MINIMUMS: **Rwy 10,** std. w/ min. climb of 217' per NM to 700, or alternatively w/ std. takeoff minimums and a normal 200' per NM climb gradient, takeoff must occur no later than 2100' prior to departure end of runway or 1700-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 2,** climb heading 019° to 1600 before turning west. **Rwy 10,** climb heading 102° to 900 before proceeding on course, or for climb in visual conditions, cross Hampton Roads Executive Airport at or above 1600 before proceeding on course. **Rwy 20,** climb heading 199° to 1000 before turning North. **Rwy 28,** climb heading 282° to 1500 before turning North.

NOTE: **Rwy 2,** multiple trees beginning 693' from departure end of runway, 286' left of centerline, up to 100' AGL/124' MSL. Multiple trees beginning 917' from departure end of runway, 422' right of centerline, up to 100' AGL/124' MSL. **Rwy 10,** trees 688' from departure end of runway, 374' left of centerline, 61' AGL/85' MSL. Vehicle on road and multiple trees beginning 750' from departure end of runway, 359' right of centerline, up to 100' AGL/124' MSL. Tower 1.1 NM from departure end of runway, 1424' left of centerline, 175' AGL/192' MSL. **Rwy 20,** vehicle on road and multiple trees beginning 199' from departure end of runway, 250' left of centerline, up to 100' AGL/124' MSL. Vehicle on road and multiple trees beginning 595' from departure end of runway, 8' right of centerline, up to 100' AGL/124' MSL. **Rwy 28,** multiple trees beginning 2711' from departure end of runway, 366' left of centerline, up to 100' AGL/124' MSL. Vehicle on road 3' from departure end of runway, 112' right of centerline, 17' AGL/34' MSL. Multiple trees beginning 2595' from departure end of runway, 362' right of centerline, up to 100' AGL/124' MSL.

NORFOLK, VA (CON'T)

NORFOLK INTL

NOTES: **Rwy 5,** mobile crane 4091' from departure end of runway, 1249' right of centerline, 150' AGL/163' MSL. Multiple ship masts beginning 2761' from departure end of runway, 22' right of centerline, up to 100' AGL/100' MSL. Multiple ship masts beginning 2564' from departure end of runway, 133' left of centerline, up to 100' AGL/100' MSL. Obstruction light on pole 3978' from departure end of runway, 931' left of centerline, 138' AGL/146' MSL. Multiple towers beginning 4045' from departure end of runway, 982' left of centerline, up to 138' AGL/146' MSL. Obstruction light on pole 2898' from departure end of runway, 811' right of centerline, 84' AGL/98' MSL. Antenna 4115' from departure end of runway, 1585' right of centerline, 117' AGL/131' MSL. Tower 2974' from departure end of runway, 772' right of centerline, 90' AGL/98' MSL, obstruction light on pole 2696' from departure end of runway, 1063' left of centerline, 84' AGL/91' MSL. Bush 29' from departure end of runway, 307' right of centerline, 6' AGL/20' MSL. Tree 1459' from departure end of runway, 159' left of centerline, 41' AGL/55' MSL. Tower 2938' from departure end of runway, 1254' left of centerline, 89' AGL/94' MSL. Tree 1399' from departure end of runway, 201' right of centerline, 38' AGL/52' MSL. Sign 82' from departure end of runway, 301' left of centerline, 2' AGL/19' MSL. Terrain 23' from departure end of runway, 227' left of centerline, 0' AGL/17'MSL. **Rwy 14,** tree 2541' from departure end of runway, 432' right of centerline, 101' AGL/121' MSL. Multiple trees beginning 443' from departure end of runway, 398' left of centerline, up to 75' AGL/95' MSL. Pole 1410' from departure end of runway, 254' right of centerline, 45' AGL/62' MSL. **Rwy 23,** rod on obstruction light pole 1012' from departure end of runway, 650' right of centerline, 56' AGL/73' MSL. Multiple trees beginning 619' from departure end of runway, 584' left of centerline, up to 81' AGL/98' MSL. Obstruction light on pole 1433' from departure end of runway, 738' left of centerline, 54' AGL/71' MSL. Multiple trees beginning 323' from departure end of runway, 504' right of centerline, up to 26' AGL/43' MSL. Pole 2165' from departure end of runway, 840' right of centerline, 57' AGL/74' MSL. **Rwy 32,** multiple trees beginning 17' from departure end of runway, 460' right of centerline, up to 81' AGL/98' MSL. Multiple trees and poles beginning 60' from departure end of runway, 333' left of centerline, up to 87' AGL/92' MSL. Road 207' from departure end of runway, 231' right of centerline, 12' AGL/29' MSL. Multiple obstruction lights on towers 201' from departure end of runway, 135' left of centerline, up to 12' AGL/27' MSL.

NORFOLK NS (CHAMBERS FIELD)(KNGU)

NORFOLK, VA 08269

Rwy 28: 300-1½*

* Or standard with minimum climb of 235'/NM (DoD) or 245'/NM (civil) to 300.

TAKE-OFF OBSTACLES: **Rwy 10:** Trees with a maximum height of 100' within 1500' of departure end of rwy. Cross departure end of rwy at or above 35' AGL/48' MSL.

OAKLAND, MD

GARRETT COUNTY (2G4)

ORIG 08101 (FAA)

NOTE: **Rwy 9,** Multiple trees beginning 75' from departure end of runway, 94' left of centerline, up to 100' AGL/2939' MSL. Multiple trees beginning 76' from departure end of runway, 47' right of centerline, up to 100' AGL/2939' MSL. **Rwy 27,** Multiple trees beginning 15' from departure end of runway, 334' left of centerline, up to 100' AGL/3019' MSL. Multiple trees beginning 19' from departure end of runway, 107' right of centerline, up to 100' AGL/3019' MSL.

OCEAN CITY, MD

OCEAN CITY MUNI

TAKE-OFF MINIMUMS: **Rwys 2, 32**, 400-2 or std. with a min. climb of 260' per NM to 500.

OCEANA NAS (APOLLO SOUCEK FIELD) (KNTU)

VIRGINIA BEACH, VA. 09351

TAKE-OFF OBSTACLES: **Rwy 5L,** Trees 115' MSL, 3706' from DER, 97' right of centerline. **Rwy 5R,** Trees 115' MSL, 3706' from DER, 603' left of centerline. **Rwy 14L,** Trees 105' MSL, 2792' from DER, 7' left of centerline. **Rwy 14R,** Trees 105' MSL, 2792' from DER, 708' left of centerline.

ORANGE, VA

ORANGE COUNTY

TAKE-OFF MINIMUMS: **Rwy 8**, 300-1.

DEPARTURE PROCEDURE: **Rwys 8, 26**, climb runway heading to 1500 before turning.

PATUXENT RIVER NAS (TRAPNELL FIELD),(KNHK)

PATUXENT RIVER, MD 09267

Rwy 6, Obstacle identification surface begins 15' above DER.

Rwy 14, Obstacle identification surface begins 35' above DER.

Rwy 20, Obstacle identification surface begins 20' above DER.

Rwy 24, Obstacle identification surface begins 15' above DER.

TAKE-OFF OBSTACLES: **Rwy 6,** Pole 63' AGL/83' MSL, 1967' from DER, 981' left of centerline. **Rwy 14,** Trees 42' AGL/57' MSL, 190' from DER, 223' left of centerline. Two lane road crossing rwy thld max ht 17' AGL/33' MSL, 193' from DER. Pole 34' AGL/50' MSL, 315' from DER, 198' left of centerline. Trees 43' AGL/59' MSL, 520' from DER, 637' right of centerline. **Rwy 20,** Trees 44' AGL/81' MSL, 1555' from DER, 845' right of centerline. Trees 56' AGL/93' MSL, 2057' from DER, 778' right of centerline. Trees 67' AGL/104' MSL, 2077' from DER, 818' right of centerline. Trees 93' AGL/130' MSL, 3029' from DER, 32' left of centerline. **Rwy 24,** 43' AGL/81' MSL, 1682' from DER, 582' left of centerline. Trees 57' AGL/93' MSL, 2015' from DER, 965' left of centerline. Trees 66' AGL/104' MSL, 2056' from DER, 948' left of centerline.

PETERSBURG, VA

DINWIDDIE COUNTY (PTB)

ORIG 07354 (FAA)

TAKE-OFF MINIMUMS: **Rwys 32, 14,** NA-obstacles.

NOTE: **Rwy 5,** numerous trees beginning 911' from departure end of runway, 551' left of centerline, up to 65' AGL/254' MSL. Fence 161' from departure end of runway, 472' right of centerline, 7' AGL/196' MSL. Tree 1031' from departure end of runway, 690' right of centerline, 57' AGL/256' MSL. **Rwy 23,** numerous trees beginning 2615' from departure end of runway, 69' right of centerline, up to 80' AGL/289' MSL. Fence 10' from departure end of runway, 476' left of centerline, 10' AGL/199' MSL. Numerous trees beginning 819' from departure end of runway, 528' left of centerline, up to 72' AGL/281' MSL.

PHILLIPS AAF (KAPG)

ABERDEEN PROVING GROUND, MD . . 07270

TAKE-OFF OBSTACLES: **Rwy 4**, vehicle on road 1059' from DER, on centerline, 10' AGL/86' MSL. Tree 1126' from DER, 118' left of centerline, 29' AGL/88' MSL. **Rwy 22**, vehicle on road 234' from DER, 27' right of centerline, 10' AGL/49' MSL. Multiple trees beginning 398' from DER, 311' right of centerline, up to 50' AGL/89' MSL. Tree 1094' from DER, 49' left of centerline, 43' AGL/62' MSL.

QUANTICO MCAF (TURNER FIELD) (KNYG)

QUANTICO, VA 09295

Diverse departures not authorized.

Rwy 2, 400-2½*

Rwy 20, 300-1¼**

* Or standard with minimum civil climb of 470 ft/NM to 600, minimum military climb of 410 ft/NM to 500.

** Or standard with minimum civil climb of 360 ft/NM to 400, minimum military climb of 320 ft/NM to 400.

DEPARTURE PROCEDURE: **Rwy 2,** Climbing right turn to 2000 direct BRV VORTAC or to assigned heading for radar vectors. **Rwy 20,** Climb to 2000 direct BRV VORTAC or as assigned for radar vectors.

TAKE-OFF OBSTACLES: **Rwy 2,** Multiple trees on rising terrain 100' AGL/296' MSL, 4075' from DER, 803' left of centerline. Multiple trees on rising terrain 100' AGL/197' MSL, 5763' from DER, 106' left of centerline. Multiple trees 100' AGL/240' MSL, 5763' from DER, 509' right of centerline. Smokestack 100' MSL, 2310' from DER, 401' left of centerline. Multiple smokestacks up to 397' MSL, 2 NM from DER, 4175' right of centerline. **Rwy 20,** Terrain 27' MSL, starting 347' from DER, 192' right of centerline. Trees 34' AGL/213' MSL, 5749' from DER, 1878' right of centerline.

QUINTON, VA

NEW KENT COUNTY

NOTE: **Rwy 10,** trees beginning 358' from departure end of runway, 6' left of centerline, up to 100' AGL/169' MSL. Trees beginning 994' from departure end of runway, 602' right of centerline, up to 100' AGL/209' MSL. Trees beginning 1396' from departure end of runway, 389' left of centerline, up to 100' AGL/209' MSL. Trees beginning 3422' from departure end of runway, left and right of centerline, up to 100' AGL/239' MSL. **Rwy 28,** trees beginning 345' from departure end of runway, 296' right of centerline, up to 100' AGL/209' MSL. Trees beginning 367' from departure end of runway, 527' left of centerline, up to 100' AGL/209' MSL. Trees beginning 2134' from departure end of runway, left and right of centerline, 100' AGL/239' MSL.

RICHLANDS, VA

TAZEWELL COUNTY

TAKE-OFF MINIMUMS: **Rwy 7,** 300-1 or std. with a min. climb of 430' per NM to 3000. **Rwy 25,** 300-1 or std. with a min. climb of 280' per NM to 2900.

DEPARTURE PROCEDURE: **Rwy 7,** climb runway heading to 4700 before proceeding southbound. **Rwy 25,** climb runway heading to 4100 before proceeding southbound.

RICHMOND, VA

CHESTERFIELD COUNTY

TAKE-OFF MINIMUMS: **Rwy 15,** 800-1 or std. with a min. climb of 280' per NM to 1200. **Rwy 33**, 1200-1, or std. with a min. climb of 220' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 15,** climb runway heading to 1200' before proceeding on course. **Rwy 33**, climb runway heading to 1700' before proceeding on course.

NOTE: **Rwy 15,** 18' AGL pole 1315' from departure end of runway, 304' left of centerline. **Rwy 33,** 84' AGL tree 2399' from departure end of runway, 84' left of centerline.

RICHMOND INTL

NOTE: **Rwy 2,** cross departure end of runway at or above 30' AGL/195' MSL. **Rwy 7,** cross departure end of runway at or above 34' AGL/223' MSL. **Rwy 16,** cross departure end of runway at or above 22' AGL/183' MSL. **Rwy 20,** cross departure end of runway at or above 35' AGL/193' MSL. **Rwy 25,** cross departure end of runway at or above 20' AGL/176' MSL. **Rwy 34,** cross departure end of runway at or above 10' AGL/177' MSL.

RICHMOND/ASHLAND, VA

HANOVER COUNTY MUNI (OFP)

ORIG 09239 (FAA)

NOTE: **Rwy 16,** treees beginning 48' from DER, 479' left of centerline, up to 101' AGL/291' MSL. Poles beginning 1077' from DER, 36' left of centerline, up to 36' AGL/236' MSL. Pole 1120' from DER 166' right of centerline 30' AGL/230' MSL. Trees beginning 1307' from DER, 26' left of centerline, up to 108' AGL/298' MSL. Trees beginning 1431' from DER, 319' right of centerline, up to 104' AGL/294' MSL. **Rwy 34,** road and trees beginning 149' from DER, 345' right of centerline, up to 47' AGL/247' MSL. Road and trees beginning 410' from DER, 386' left of centerline, up to 103' AGL/293' MSL. Poles beginning 660' from DER, on centerline, up to 39' AGL/239' MSL. Trees beginning 1402' from DER, 445' right of centerline, up to 100' AGL/290' MSL. Trees beginning 2714' from DER, 487' right of centerline, up to 104' AGL/304' MSL.

RIDGELY, MD

RIDGELY AIRPARK

NOTE: **Rwy 12,** multiple trees beginning 592' from departure end of runway, 6' left of centerline, up to 100' AGL/160' MSL. Multiple trees beginning 239' from departure end of runway, 338' right of centerline, up to 100' AGL/160' MSL.

ROANOKE, VA

ROANOKE RGNL/ WOODRUM FIELD (ROA)

AMDT 8 08213 (FAA)

TAKE-OFF MINIMUMS: **Rwys 6, 33**, NA - obstacles. **Rwy 24,** std. w/ min. climb of 216' per NM to 2600.

DEPARTURE PROCEDURE: **Rwy 15**, climb heading 154° to intercept the ROA VORTAC R-122 to 4000 before proceeding on course. **Rwy 24**, climb west on I-SZK LDA localizer course on 4200 to DIXXY Int/I-SZK 15.25 DME before proceeding on course.

NOTE: **Rwy 15,** trees 1.18 NM from departure end of runway, 2122' left of centerline, 60' AGL/1321' MSL. **Rwy 24,** bush 86' from departue end of runway, 385' left of centerline, 4' AGL/1163' MSL. Tree 150' from departure end of runway, 415' right of centerline, 60' AGL/1171' MSL. Tree 737' from departure end of runway, 454' right of centerline, 60' AGL/1179' MSL. Tree 1164' from departure end of runway, 726' right of centerline, 60' AGL/1206' MSL.

SALISBURY, MD

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

ORIG 07354 (FAA)

NOTE: **Rwy 5,** trees and antennas beginning 961' from departure end of runway, 49' left of centerline, up to 83' AGL/135' MSL. Trees beginning 2769' from departure end of runway, 5' right of centerline, up to 85' AGL/136' MSL. **Rwy 23,** trees beginning 514' from departure end of runway, 518' left of centerline, up to 68' AGL/118' MSL. Trees and antenna beginning 774' from departure end of runway, 303' right of centerline, up to 76' AGL/127' MSL. Trees beginning 2835' from departure end of runway, 186' right of centerline, up to 75' AGL/125' MSL. **Rwy 32,** trailer, hangar and obstruction light beginning 120' from departure end of runway, 509' left of centerline, up to 23' AGL/72' MSL. Trees beginning 2215' from departure end of runway, 140' left of centerline, up to 79' AGL/128' MSL.

SALUDA, VA

HUMMEL FIELD

DEPARTURE PROCEDURE: **Rwys 1, 19**, climb runway heading to 1000 before turning on course.

NOTE: **Rwy 1,** 23' AGL tree left of departure end of runway, 65' AGL tree 663' from departure end of runway, 129' left of centerline. **Rwy 19,** 26' AGL tree 237' from departure end of runway, 116' right of centerline.

SOUTH BOSTON, VA

WILLIAM M. TUCK

TAKE-OFF MINIMUMS: **Rwy 1,** 300-1. **Rwys 5, 23,** NA.

NOTE: **Rwy 1,** 72' AGL tower 324' from departure end of runway, 283' left of runway centerline.

SOUTH HILL, VA

MECKLENBURG-BRUNSWICK RGNL

TAKE-OFF MINIMUMS: **Rwy 1**, 300-1 or std. with a min. climb of 250' per NM to 1000. **Rwy 19,** 300-1 or std. with a min. climb of 370' per NM to 1000'

DEPARTURE PROCEDURE: **Rwys 1,19,** climb runway heading to 1000 before proceeding on course.

STAFFORD, VA

STAFFORD RGNL

DEPARTURE PROCEDURE: **Rwy 15,** climbing left turn to 2000, intercept and proceed via BRV R-310 to BRV VORTAC, before proceeding on course. **Rwy 33,** climbing left turn to 2000, intercept and proceed via BRV R-306 to BRV VORTAC, before proceeding on course.

NOTE: **Rwy 33,** cross departure end of runway at or above 34' AGL/246' MSL.

STAUNTON-WAYNESBORO-HARRISONBURG, VA

SHENANDOAH VALLEY RGNL (SHD)

AMDT 6 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** std. w/ min. climb of 273' per NM to 3800, or 2200-2½ for climb in visual conditions. **Rwy 23,** standard, or 2200-2½ for climb in visual conditions.

DEPARTURE PROCEDURE: **Rwy 5**, climb heading 047° to 3400 before turning right, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course. **Rwy 23**, climb heading 227° to 4400 before proceeding on course, or for climb in visual conditions cross Shenandoah Valley Rgnl airport at or above 3300 before proceeding on course.

NOTE: **Rwy 5,** trees 1720' from DER, 635' right of centerline, up to 100' AGL/1279' MSL. **Rwy 23,** tree 679' from DER, 616' left of centerline, 35' AGL/1194' MSL.

STEVENSVILLE, MD

BAY BRIDGE

TAKE-OFF MINIMUMS: **Rwy 29,** 500-3 or std. w/ min. climb of 317' per NM to 800.

NOTE: **Rwy 11,** road 354' from departure end of runway, on centerline, 17' AGL/35' MSL. Multiple trees beginning 1471' from departure end of runway, 32' left of centerline, up to 100' AGL/119' MSL. Multiple trees beginning 1485' from departure end of runway, 16' left of centerline, up to 100' AGL/119' MSL. **Rwy 29,** twin bridges 2.25 NM from departure end of runway, 2767' right of centerline, 410' AGL/410' MSL.

SUFFOLK, VA

SUFFOLK EXECUTIVE

TAKE-OFF MINIMUMS: **Rwys 4, 7, 22,** 300-1. **Rwy 25,** 300-1 or std. w/ a min. climb o f260' per NM to 300. Alternatively, with standard takeoff minimums and a normal 200' /NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.

NOTE: **Rwy 4,** trees 1050' from departure end of runway, 250' left of centerline, up to 100' AGL/169' MSL. Trees 1076' from departure end of runway, 105' left of centerline, up to 100' AGL/169' MSL. Powerline 1698' from departure end of runway, 825' right of centerline, 105' AGL/169' MSL. Powerline 3056' from departure end of runway, 524' right of centerline, 105' AGL/174' MSL. **Rwy 7,** trees 1143' from departure end of runway, 688' left of centerline, up to 100' AGL/169' MSL. Powerline 1211' from departure end of runway, 717' right of centerline, 105' AGL/169' MSL. Powerline 2176' from departure end of runway, 259' left of centerline, 105' AGL/169' MSL. Trees 2430' from departure end of runway, 118' right of centerline, up to 100' AGL/169' MSL. Powerline 3140' from departure end of runway, 1263' left of centerline, 105' AGL/174' MSL. **Rwy 22,** road 536' from departure end of runway, 62' left of centerline, 15' AGL/84' MSL. Trees 1403' from departure end of runway, 765' left of centerline, up to100' AGL/169' MSL. Trees 3595' from departure end of runway, 792' right of centerline, up to 100' AGL/174' MSL. **Rwy 25,** road 198' from departure end of runway, 33' right of centerline, 15' AGL/89' MSL. Trees 805' from departure end of runway, 423' right of centerline, up to 100' AGL/169' MSL. Trees 3258' from departure end of runway, 57' right of centerline, up to 100' AGL/174' MSL.

TANGIER, VA

TANGIER ISLAND (TGI)

ORIG 09015 (FAA)

NOTE: **Rwy 2,** vehicle on road 343' from departure end of runway, on centerline, 15' AGL/19' MSL. Boat masts 638' from departure end of runway, 632' right to 755' left of centerline, up to 63' MSL. **Rwy 20,** buildings beginning 7' from departure end of runway, 206' left of centerline, 45' AGL/50' MSL. Rock wall at departure end of runway, 57' right of centerline, 4' AGL/8' MSL.

TAPPAHANNOCK, VA

TAPPAHANNOCK-ESSEX COUNTY

TAKE-OFF MINIMUMS: **Rwy 10,** 300-1¼ or std. w/ min. climb of 303' per NM to 500. **Rwy 28,** 300-1 or std. w/ min. climb of 366' per NM to 500.

NOTE: **Rwy 10,** terrain 6' from departure end of runway, 20' left of centerline, up to 135' MSL. Terrain 29' from departure end of runway, 281' left of centerline, up to 139' MSL. **Rwy 28,** terrain beginning 12' from departure end of runway, 5' right of centerline, up to 151' MSL.

WALLOPS ISLAND, VA

WALLOPS FLIGHT FACILITY (WAL)
ORIG 09127 (FAA)

NOTE: **Rwy 4,** trees beginning 1254' from DER, 741' left of centerline, up to 100' AGL/109' MSL. Trees beginning 1814' from DER, 79' right of centerline, up to 100' AGL/134' MSL. **Rwy 10,** trees beginning 1252' from DER, 818' left of centerline, up to 100' AGL/124' MSL. **Rwy 17,** trees beginning 169' from DER, 218' left of centerline, up to 100' AGL/119' MSL. **Rwy 22,** trees beginning 793' from DER, 315' left of centerline, up to 100' AGL/129' MSL. **Rwy 28,** trees beginning 945' from DER, 495' right of centerline, up to 100' AGL/139' MSL. **Rwy 35,** trees beginning 3' from DER, 394' left of centerline, up to 100' AGL/124' MSL. Trees beginning 21' from DER, 219' right of centerline, up to 100' AGL/124' MSL.

WAKEFIELD, VA

WAKEFIELD MUNI

DEPARTURE PROCEDURE: Climb straight ahead to 500 before proceeding on course.

WARRENTON, VA

WARRENTON-FAUQUIER (HWY)
ORIG 09099 (FAA)

NOTE: **Rwy 15,** trees 436' from DER, 518' right of centerline, 100' AGL/439' MSL. Vehicle on road 647' from DER, 649' right of centerline, 15' AGL/354' MSL. Trees 1034' from DER, 763' left of centerline, 100' AGL/449' MSL. Trees 1924' from DER, 781' right of centerline, 100' AGL/459' MSL. Trees beginning 2239' from DER, 41' left of centerline, up to 100' AGL/459' MSL. **Rwy 33,** trees beginning 1272' from DER, 59' right of centerline, up to 41' AGL/370' MSL. Trees beginning 2610' from DER, 116' left of centerline, up to 74' AGL/413' MSL.

WASHINGTON, DC

RONALD REAGAN WASHINGTON NATIONAL

TAKE-OFF MINIMUMS: **Rwy 22,** 400-2½ or std. with a min. climb of 210' per NM to 500. **Rwy 33**, 700-3 or std. with a min. climb of 260' per NM to 700. **Rwy 1**, 600-2 or std. with a min. climb of 370' per NM to 700.

DEPARTURE PROCEDURE: **Rwy 1**, left turn as soon as practicable, intercept DCA R-328. Climb to 5000 or as assigned. **Rwy 19,** climb heading 184° to 500 before turning right. **Rwy 33,** intercept DCA R-328. Climb to 5000 or as assigned.

NOTE: **Prohibited area, P-56, 1.5 NM north of airport.**

WASHINGTON DULLES INTL (IAD)
AMDT 1 08325 (FAA)

NOTE: **Rwy 1L,** tower 1918' from departure end of runway, 680' left of centerline, 56' AGL/330' MSL. **Rwy 1C,** tree 2814' from departure end of runway, 1030' left of centerline, 86' AGL/345' MSL. **Rwy 1R,** post 12' from departure end of runway, 223' right of centerline, 8' AGL/294' MSL. **Rwy 12,** tree 520' from departure end of runway, 604' left of centerline, 28' AGL/307' MSL.

Rwy 30, trees beginning 161' from departure end of runway, 520' left of centerline, up to 57' AGL/396' MSL. Trees beginning 532' from departure end of runway, 600' right of centerline, up to 64' AGL/383' MSL.

WEST POINT, VA

MIDDLE PENINSULA RGNL (FYJ)
ORIG 08157 (FAA)

NOTE: **Rwy 10,** multiple trees beginning 86' from departure end of runway, left and right of centerline, up to 100' AGL/129' MSL. **Rwy 28,** multiple trees beginning 33' from departure end of runway, left and right of centerline, up to 100' AGL/119' MSL. Ship mast 3427' from departure end of runway, left and right of centerline, 135' AGL/135' MSL.

WESTMINSTER, MD

CARROLL COUNTY RGNL/JACK B. POAGE FIELD

TAKE-OFF MINIMUMS: **Rwy 16**, 400-1 or std. with a min. climb of 210' per NM to 1300. **Rwy 34,** 300-1 or std. with a min. climb of 320' per NM to 1000.

NOTE: **Rwy 16,** 87' AGL trees 644' from departure end of runway. **Rwy 34,** 102' AGL trees 116' from departure end of runway, 220' right of centerline.

CLEARVIEW AIRPARK (2W2)
ORIG 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 32,** 300-2¼ or std. w/ min. climb of 290' per NM to 1200.

NOTE: **Rwy 14,** vehicles and aircraft on road/taxiway 14' from DER, 47' right to left of centerline, 15' AGL/834' MSL. Trees beginning 35' from DER, 200' left of centerline, up to 100' AGL/939' MSL. Trees beginning 21' from DER, 90' right of centerline, up to 100' AGL/919' MSL. **Rwy 32,** vehicle on road 191' from DER, 516' left of centerline, 15' AGL/774' MSL. Trees beginning 8' from DER, 24' left of centerline, up to 100' AGL/959' MSL. Trees beginning 60' from DER, 50' right of centerline, up to 100' AGL/859' MSL.

WILLIAMSBURG, VA

WILLIAMSBURG-JAMESTOWN

TAKE-OFF MINIMUMS: **Rwy 31**, 300-1.

WILMINGTON, DE

NEW CASTLE

TAKE-OFF MINIMUMS: **Rwy 19,** 300-1 or std. w/ min. climb of 266' per NM to 300.

NOTE: **Rwy 1,** multiple trees beginning 751' from departure end of runway, 32' left of centerline, up to 59' AGL/120' MSL, tree 1219' from departure end of runway, 482' right of centerline, 57' AGL/118' MSL, bush 118' from departure end of runway, 385' left of centerline, 4' AGL/65' MSL. **Rwy 9,** multiple trees beginning 1229' from departure end of runway, 30' right of centerline up to 62' AGL/133' MSL, tree 975' from departure end of runway, 66' left of centerline, 53' AGL/124' MSL, light pole 948' from departure end of runway, 596' right of centerline, 44' AGL/115' MSL, tree 1740' from departure end of runway, 458' left of centerline, 83' AGL/134' MSL, light pole 945' from departure end of runway, 316' right of centerline, 38' AGL/109' MSL, rod on building 916' from departure end of runway, 457' left of centerline, 29' AGL/100' MSL. **Rwy 14,** obstacle light 553' from departure end of runway, 440' left of centerline, 29' AGL/103' MSL, rod on obstacle light 606' from departure end of runway, 615' left of centerline, 19' AGL/93' MSL. **Rwy 19,** antenna on obstruction light tower 4469' from departure end of runway, 1684' right of centerline, 153' AGL/228' MSL, tree 1575' from departure end of runway, 850' right of centerline, 45' AGL/120' MSL, obstruction light on sign 971' from departure end of runway, 448' left of centerline, 28' AGL/103' MSL. **Rwy 27,** tree 697' from departure end of runway, 533' left of centerline, 68' AGL/147' MSL. Tree 1110' from departure end of runway, 584' right of centerline, 38' AGL/117' MSL, pole 793' from departure end of runway, 615' right of centerline, 28' AGL/107' MSL, bush 408' from departure end of runway, 415' left of centerline, 12' AGL/91' MSL. **Rwy 32,** tree 711' from departure end of runway, 207' right of centerline, 29' AGL/104' MSL, tree 1162' from departure end of runway, 83' right of centerline, 32' AGL/107' MSL.

WINCHESTER, VA

WINCHESTER RGNL

TAKE-OFF MINIMUMS: **Rwy 32,** 800-2 or std. with a min. climb of 210' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 32,** climb runway heading to 1700 before turning on course.

WISE, VA

LONESOME PINE

TAKE-OFF MINIMUMS: **Rwy 24,** 1800-3 or std. with a min. climb of 400' per NM to 4700.

DEPARTURE PROCEDURE: **Rwy 6,** climb on runway heading to 3800 before proceeding on course.
Rwy 24, climb on runway heading to 4500 before proceeding on course.

NDB RWY 22

NDB APG 349	APCH CRS 226°	Rwy ldg 7997 TDZE 46 Arpt Elev 57

AL-555 [USA]

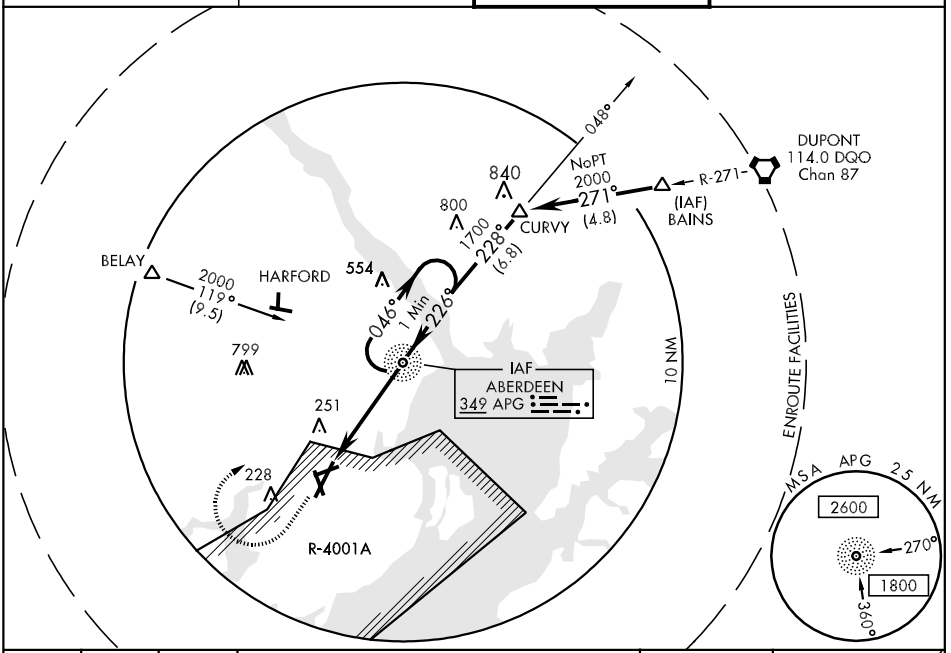
PHILLIPS AAF (APG)

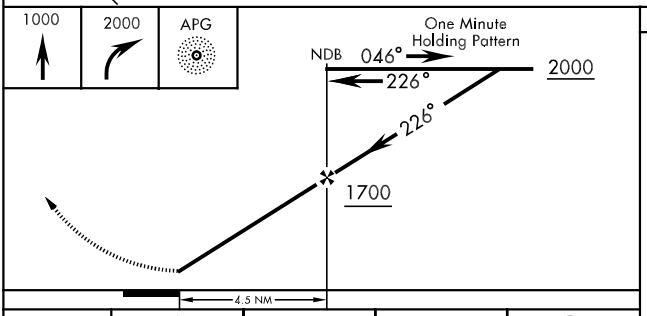
* When local altimeter setting not received, use BALTIMORE altimeter setting.

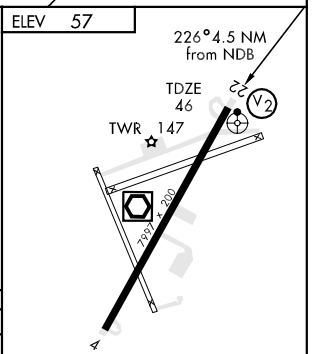
ODALS

MISSED APPROACH: Climb to 1000, then climbing right turn to 2000 direct to APG NDB and hold.

ATIS *	POTOMAC APP CON	PHILLIPS TOWER *	GND CON
108.4	126.75 307.9	126.15 229.6	121.9







CATEGORY	A	B	C	D
S-22	560-¾ 514(600-¾)		560-1¼ 514(600-1¼)	560-1½ 514(600-1½)
CIRCLING	560-1 502(600-1)		600-1½ 542(600-1½)	680-2 622(700-2)
* BALTIMORE ALTIMETER SETTING MINIMUMS				
S-22	640-¾ 594(600-¾)		640-1¼ 594(600-1¼)	640-1½ 594(600-1½)
CIRCLING	640-1 582(600-1)		680-1¾ 622(700-1¾)	760-2¼ 702(800-2¼)

HIRL Rwy 4-22

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

NE-3, 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 22

APCH CRS	Rwy ldg	7997
218°	TDZE	45
	Arpt Elev	57

AL-555 [USA]

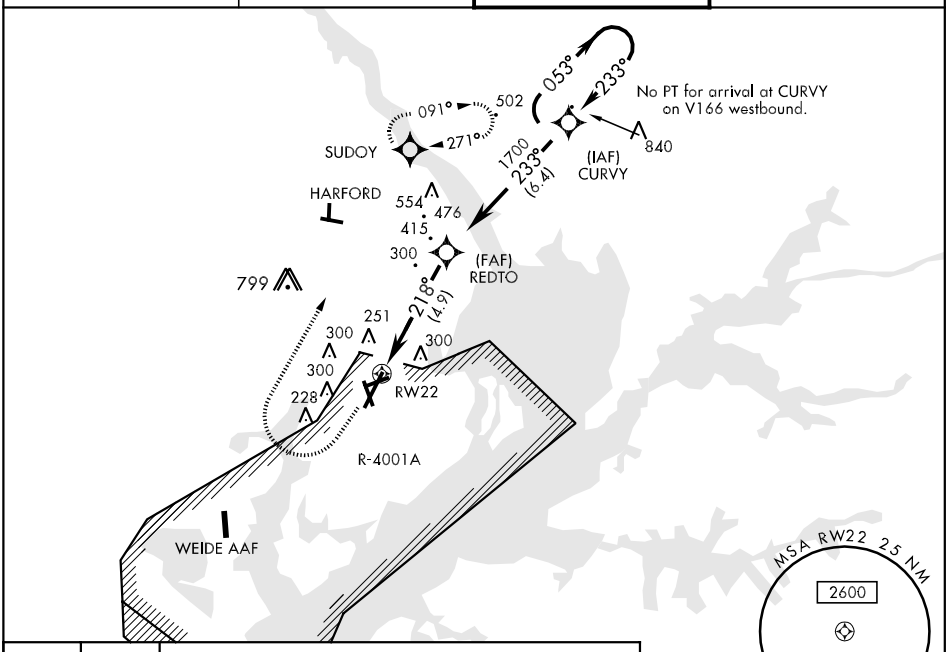
PHILLIPS AAF (APG)

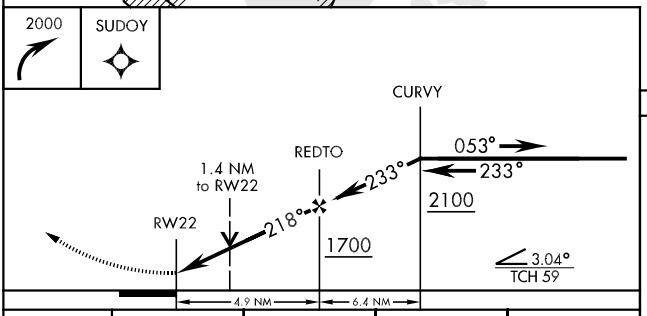
▲ *For inoperative ODALS, increase LNAV all CATS visibility ¼ mile.
**When local altimeter setting not received, use Baltimore altimeter setting.
▼ VDP NA with Baltimore altimeter setting.
DME/DME RNP-.3 NA

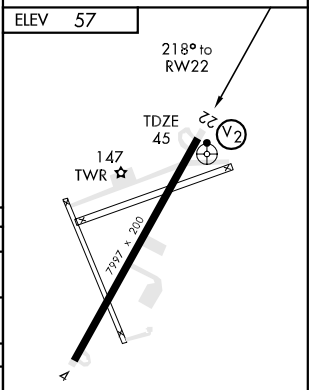
ODALS

MISSED APPROACH: Climbing right turn to 2000 direct SUDOY and hold.

ATIS ★	POTOMAC APP CON	PHILLIPS TOWER ★	GND CON
108.4	126.75 307.9	126.15 229.6	121.9







CATEGORY	A	B	C	D
LNAV MDA*	560-¾ 515(600-¾)		560-1¼ 515(600-1¼)	560-1½ 515(600-1½)
CIRCLING	560-1 503(600-1)		560-1½ 503(600-1½)	620-2 563(600-2)
** BALTIMORE ALTIMETER SETTING MINIMUMS				
LNAV MDA*	640-¾ 595(600-¾)		640-1¼ 595(600-1¼)	640-1½ 595(600-1½)
CIRCLING	640-1 583(600-1)		640-1½ 583(600-1½)	640-2 583(600-2)

HIRL Rwy 4-22

NE-3, 17 DEC 2009 to 14 JAN 2010

VOR/DME RWY 22

VOR/DME PPM 108.4 Chan 21	APCH CRS 226°	Rwy ldg 7997 TDZE 46 Arpt Elev 57

AL-555 [USA]

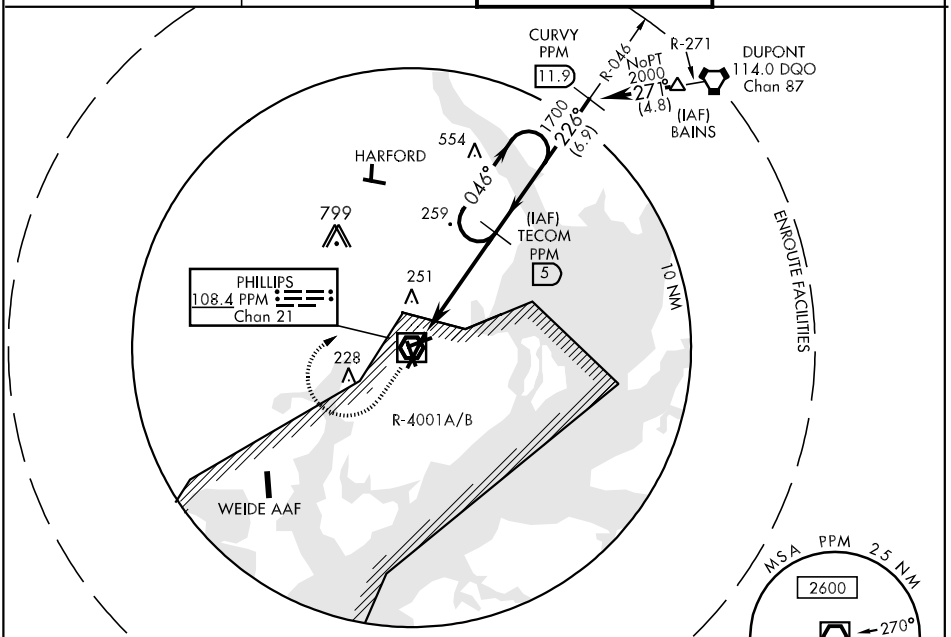
PHILLIPS AAF (APG)

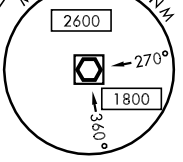
▲ ▼ * When local altimeter setting not received use Baltimore altimeter setting.

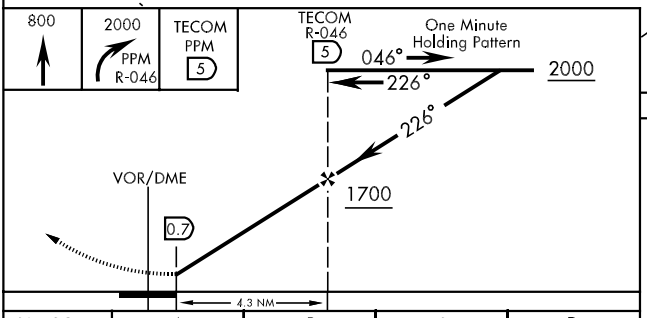
ODALS

MISSED APPROACH: Climb to 800, then climbing right to 2000 via PPM R-046 to TECOM/5 DME and hold.

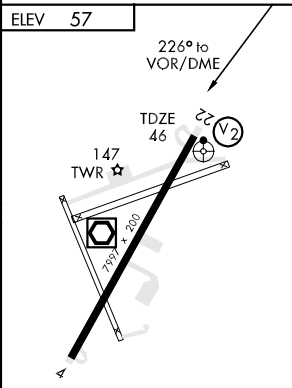
ATIS ★	POTOMAC APP CON	PHILLIPS TOWER ★	GND CON
108.4	126.75 307.9	126.15 229.6	121.9







ELEV 57



CATEGORY	A	B	C	D
S-22	500-1 454(500-1)		500-1¼ 454(500-1¼)	500-1½ 454(500-1½)
CIRCLING	520-1 462-(500-1)	560-1 502(600-1)	600-1½ 542(600-1½)	680-2 622(700-2)
* BALTIMORE ALTIMETER SETTING MINIMUMS				
S-22	580-1 534(600-1)		580-1½ 534(600-1½)	580-1¾ 534(600-1¾)
CIRCLING	580-1 522(600-1)	640-1 582(600-1)	680-1¾ 622(700-1¾)	760-2¼ 702(800-2¼)

HIRL Rwy 4-22

NE-3, 17 DEC 2009 to 14 JAN 2010

VOR RWY 22

VOR/DME PPM 108.4 Chan 21	APCH CRS 225°	Rwy ldg 7997 TDZE 45 Arpt Elev 57	AL-555 [USA]	PHILLIPS AAF (APG)

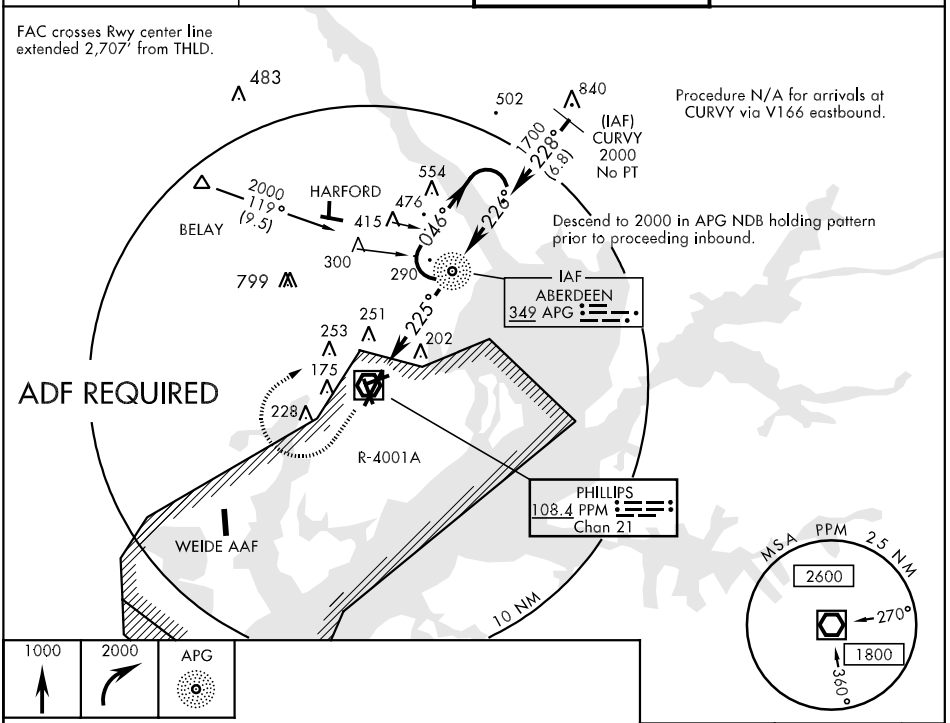
* For inoperative ODALS, increase S-22 all CATs vis ½ mile.
** When local altimeter setting not received, use Baltimore altimeter setting.
VDP NA with Baltimore altimeter setting.

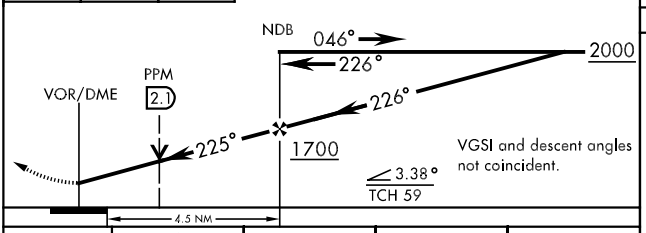
ODALS

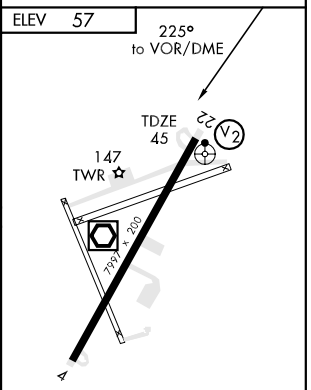
MISSED APPROACH: Climb to 1000, then climbing right turn to 2000 direct APG NDB and hold.

ATIS ★	POTOMAC APP CON	PHILLIPS TOWER ★	GND CON
108.4	126.75 307.9	126.15 229.6	121.9

FAC crosses Rwy center line extended 2,707' from THLD.







CATEGORY	A	B	C	D
S-22 *	560-¾ 515(600-¾)		560-1¼ 515(600-1¼)	560-1½ 515(600-1½)
CIRCLING	560-1 503(600-1)		560-1½ 503(600-1½)	620-2 563(600-2)
** BALTIMORE ALTIMETER SETTING MINIMUMS				
S-22 *	640-¾ 595(600-¾)		640-1¼ 595(600-1¼)	640-1½ 595(600-1½)
CIRCLING	640-1 583(600-1)		640-1½ 583(600-1½)	640-2 583(600-2)

HIRL Rwy 4-22

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	N/A
298°	TDZE	N/A
	Apt Elev	34

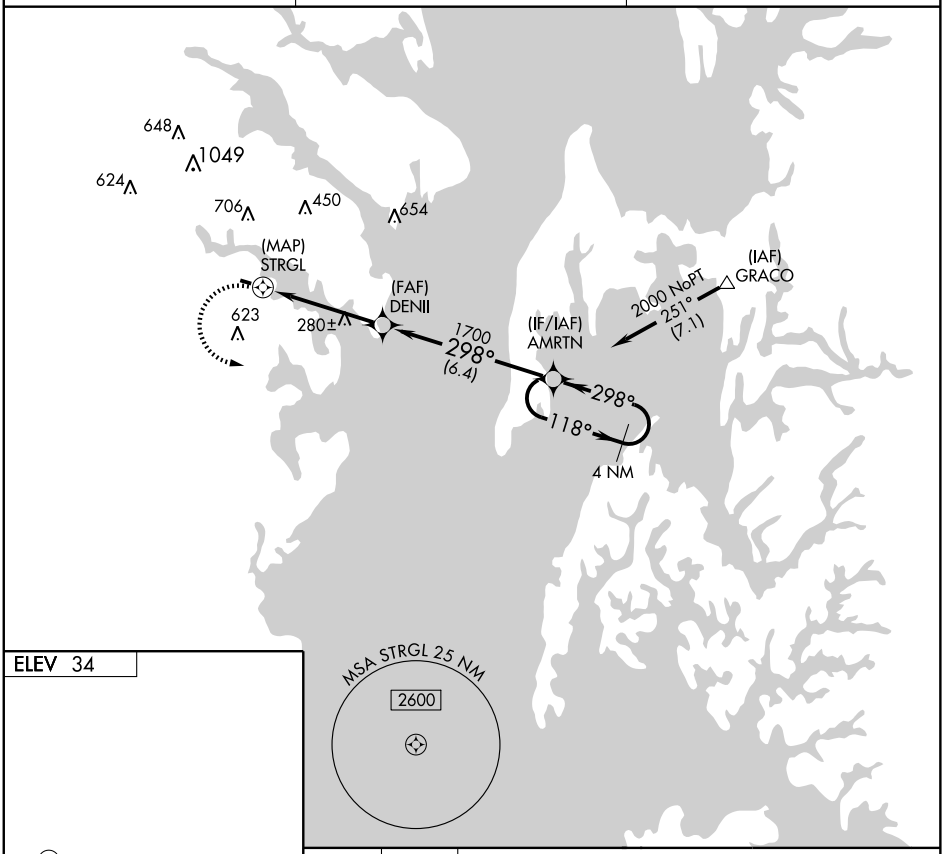
RNAV (GPS)-A

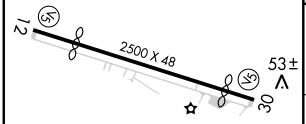
ANNAPOLIS / LEE (ANP)

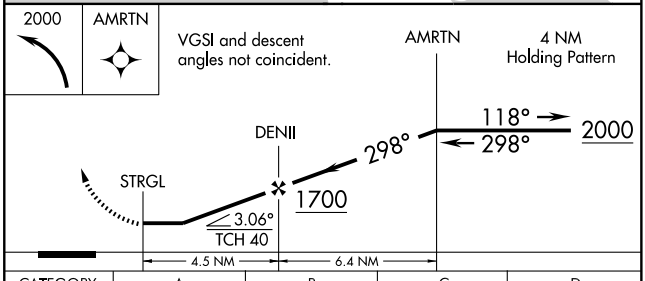
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Baltimore-Washington Intl altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climbing left turn to 2000 direct AMRTN and hold.

AWOS-3	POTOMAC APP CON	CTAF
122.9	119.7 290.475	L 122.9







CATEGORY	A	B	C	D
CIRCLING	660-1	626 (700-1)	NA	

LIRL Rwy 12-30 L

NE-3, 17 DEC 2009 to 14 JAN 2010

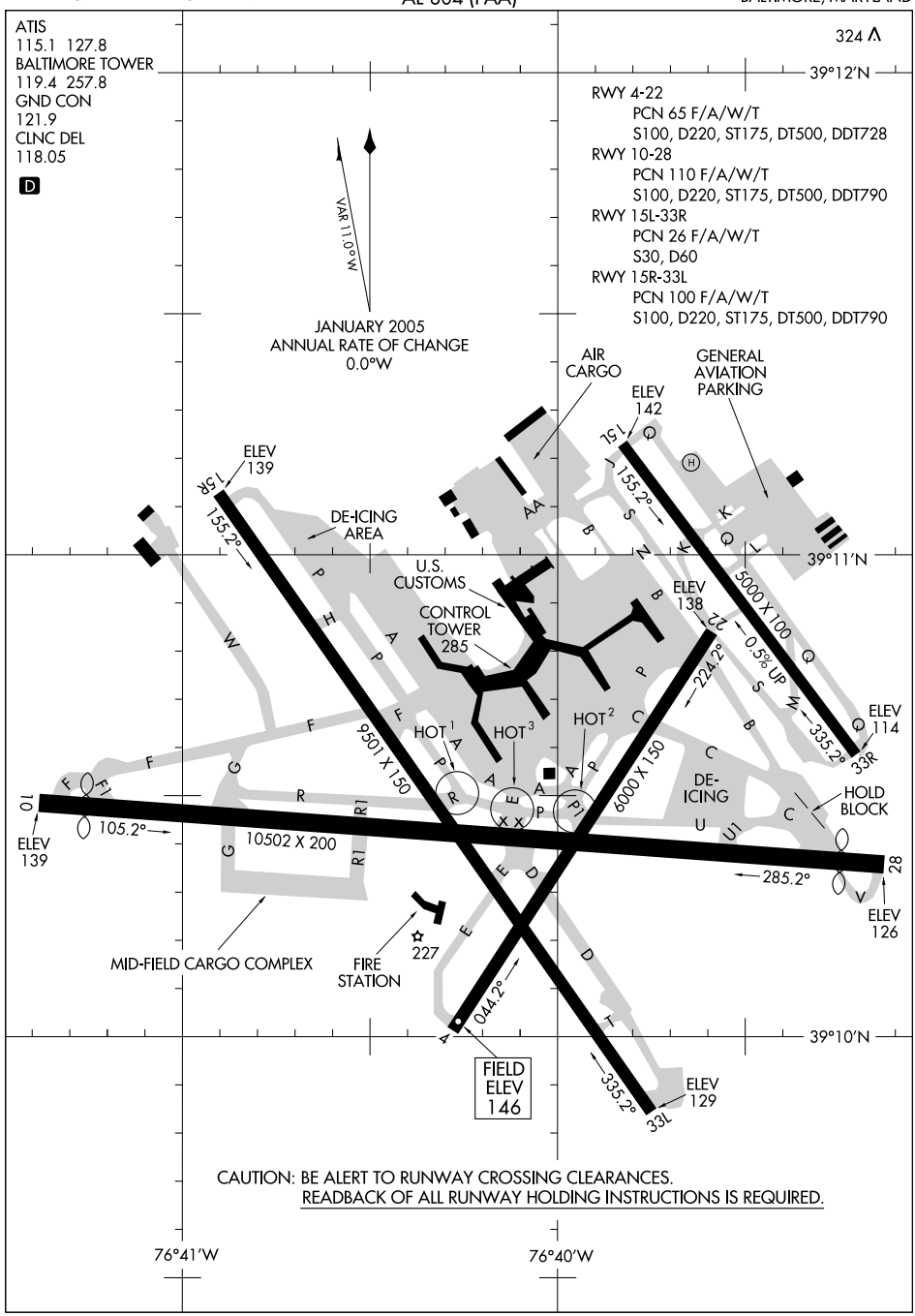
09351

AIRPORT DIAGRAM

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

AL-804 (FAA)

BALTIMORE, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-BAL	APP CRS	Rwy ldg	9952
109.7	105°	TDZE	143
		Apt Elev	146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

ILS or LOC RWY 10

DME Required.

ALSF-2

MISSED APPROACH: Climb to 2500 via BAL R-105 to HURTZ/BAL 12.1 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED

117.9 EMI Chan 126

R-127

R-025

1549

ENSUE EMI 23.1

113.7 OTT Chan 84

ALTERNATE MISSED APCH FIX

117.9 EMI Ch 126

307°

127°

R-025

R-127

ENSUE EMI 23.1

113.7 OTT Ch 84

1504

670

731

961

685

604

281±

340

281

245±

242±

741

BAL R-286

285°

1500

105°

(6.1)

555

(IF) COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

MM

IM

290

372

560

LOCALIZER 109.7 I-BAL

BALTIMORE 115.1 BAL Chan 98

105°

285°

R-105

HURTZ BAL 12.1 RADAR

533

10 NM

1049

MSA BAL 25 NM

2600

090°

2100

360°

ELEV 146 D

289±

260

256±

170

15R

15L

262

9507 X 150

22

285

167

162

33R

10502 X 200

10

28

TDZE 143

227

189

250

33L

105° 4.1 NM from FAF

COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

2500

BAL R-105 115.1

HURTZ BAL 12.1 RADAR

2000

1500

105°

MM

IM

GS 3.00°

TCH 55

1500

6.1 NM

3.6 NM

0.3 NM

0.2

CATEGORY	A	B	C	D
S-ILS 10	343/18 200 (200-½)			
S-LOC 10	580/24 437 (500-½)		580/40 437 (500-¾)	580/50 437 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-UQC	APP CRS	Rwy Idg	5000
111.95	155°	TDZE	142
		Apt Elev	146

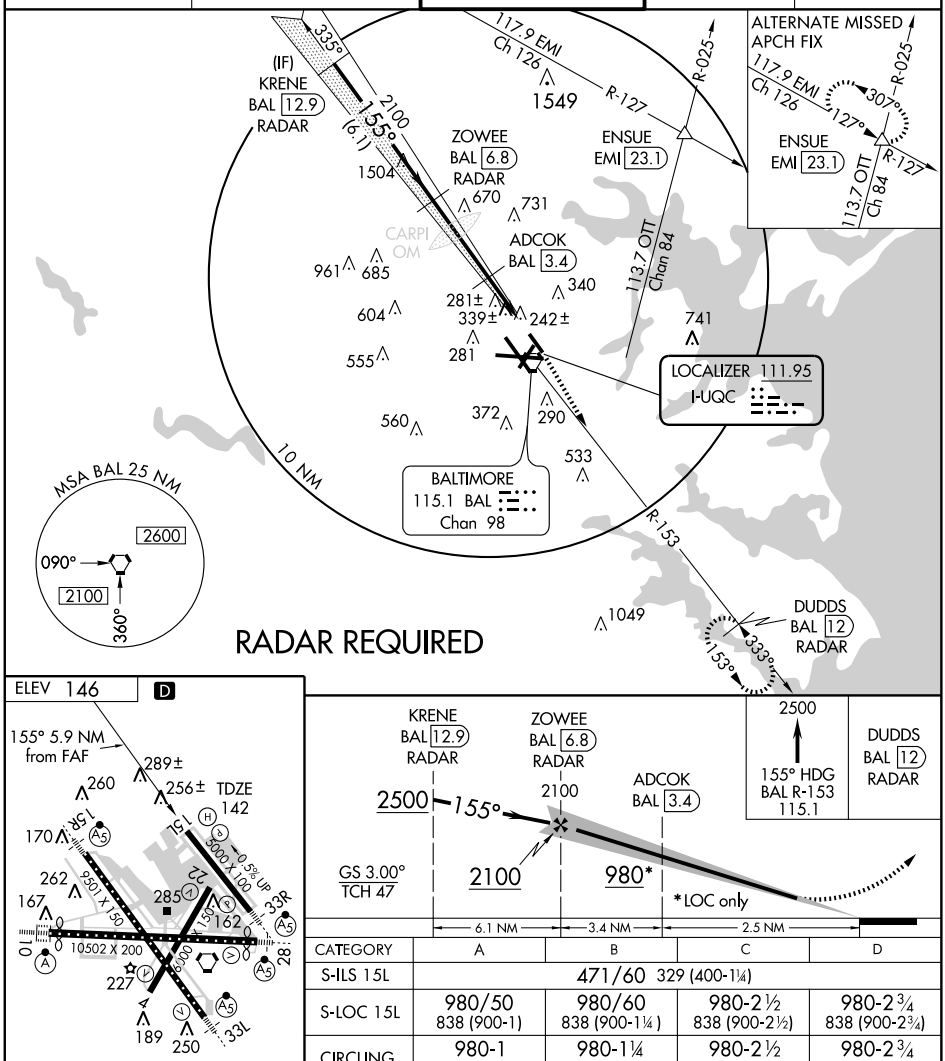
ILS or LOC RWY 15L

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

DME Required.
Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2500 via heading 155° and BAL R-153 to DUDDS/BAL 12 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05



FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
S-ILS 15L	471/60 329 (400-1¼)			
S-LOC 15L	980/50 838 (900-1)	980/60 838 (900-1¼)	980-2½ 838 (900-2½)	980-2¾ 838 (900-2¾)
CIRCLING	980-1 834 (900-1)	980-1¼ 834 (900-1¼)	980-2½ 834 (900-2½)	980-2¾ 834 (900-2¾)
ADCOK FIX MINIMUMS				
S-LOC 15L	560/50 418 (500-1)		560/60 418 (500-1¼)	
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-OEH	APP CRS	Rwy Idg	10002
109.7	285°	TDZE	142
		Apt Elev	146

ILS or LOC RWY 28

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

DME Required.
** RVR 1800 authorized with the use of FD or AP or HUD to DA.
ZIXUS Fix mimimums: For inoperative MALSR, increase S-LOC 28 Cat D visibility to RVR 5000.

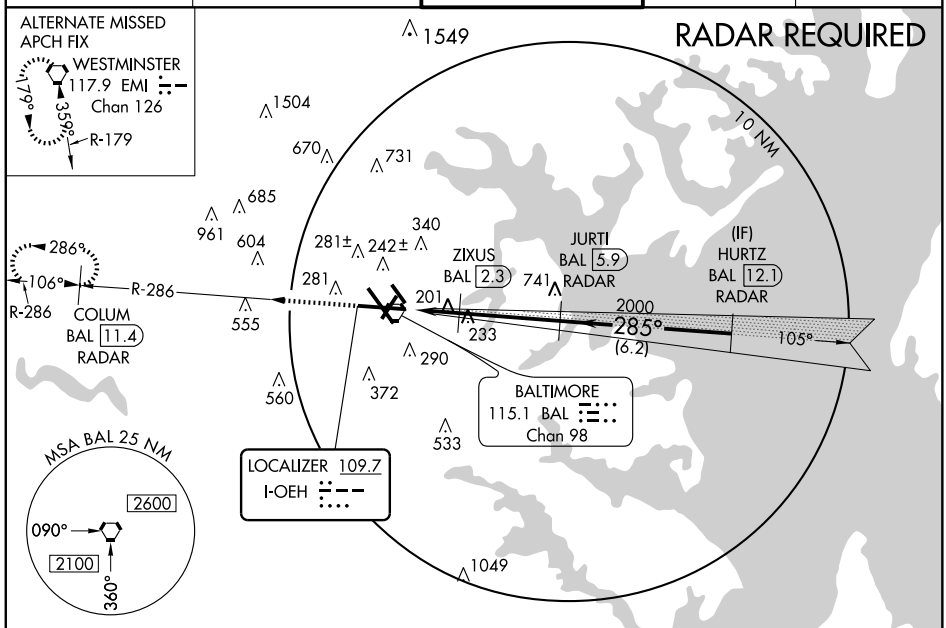
MALSR

MISSED APPROACH: Climb to 2500 via BAL R-286 to COLUM/BAL 11.4 DME/ RADAR and hold.

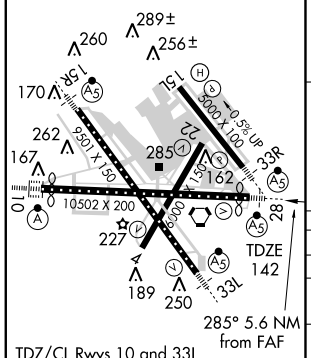
ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

ALTERNATE MISSED APCH FIX
WESTMINSTER 117.9 EMI Chan 126
079° 359° R-179

RADAR REQUIRED



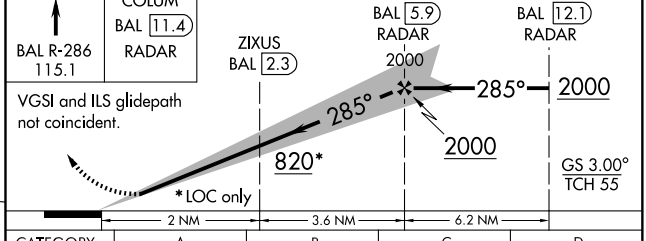
ELEV 146 D



285° 5.6 NM from FAF

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52



CATEGORY	A	B	C	D
S-ILS 28	**342/24 200 (200-½)			
S-LOC 28	820/24 678 (700-½)		820-1½ 678 (700-1½)	820-1¾ 678 (700-1¾)
CIRCLING	820-1 674 (700-1)		820-2 674 (700-2)	820-2¼ 674 (700-2¼)
ZIXUS FIX MINIMUMS				
S-LOC 28	460/24 318 (400-½)			460/40 318 (400-¾)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (500-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-RUX	APP CRS	Rwy Idg	9501
111.7	335°	TDZE	142
		Apt Elev	146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) ILS or LOC RWY 33L

DME Required.

MALSR

MISSED APPROACH: Climb to 3000 via BAL R-334 to BMORE/BAL 13.8 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

ALTERNATE MISSED APCH FIX
WESTMINSTER 117.9 EMI Chan 126
R-179

BMORE BAL 13.8 RADAR
154°
334°
R-334

RADAR REQUIRED

LOCALIZER 111.7 I-RUX

BALTIMORE 115.1 BAL Chan 98

GRAFE BAL 4.4 RADAR

RUETT OM

335° (8.6) 1500

10 NM

155°

(IF) JANNS BAL 13 RADAR

MSA BAL 25 NM
090° 2600
360° 2100

ELEV 146 D

10502 X 200
9501 X 150
5000 X 100 0.5% UP

TDZE 142

335° 4.1 NM from FAF

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

3000
BAL R-334
115.1

BMORE BAL 13.8

GRAFE BAL 4.4 RADAR

JANNS BAL 13 RADAR

1500 335° 2000

1500

GS 3.00°
TCH 54

4.1 NM 8.6 NM

CATEGORY	A	B	C	D
S-ILS 33L	342/18 200 (200-½)			
S-LOC 33L	540/24 398 (400-½)			540/40 398 (400-¾)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-BWI	APP CRS	Rwy Idg	5000
111.95	335°	TDZE	124
		Apt Elev	146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) ILS or LOC RWY 33R

Autopilot coupled approach NA below 700. DME required.

MALSR

MISSED APPROACH: Climb to 3000 via heading 335° and via BAL R-337 to KRENE/BAL 12.9 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

KRENE BAL 12.9 RADAR

117.9 EMI Ch 126

ALTERNATE MISSED APCH FIX

ENSUE EMI 23.1 RADAR

113.7 OTT Chan 84

LOCALIZER 111.95 I-BWI

BALTIMORE 115.1 BAL Chan 98

ORIOL BAL 5.6 RADAR

(IF) DUDDS BAL 12 RADAR

MSA BAL 25 NM

10 NM

RADAR REQUIRED

ELEV 146 D

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

335° 5.7 NM from FAF

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

3000 HDG 335° | BAL R-337 115.1 | KRENE BAL 12.9

ORIOL BAL 5.6 RADAR 2000

DUDDS BAL 12 RADAR

335° 2000

335° 2000

GS 3.00° TCH 56

5.7 NM 6.4 NM

CATEGORY	A	B	C	D
S-ILS 33R	331/24	207 (200-½)		
S-LOC 33R	540/24	416 (400-½)	540/40	416 (400-¾)
CIRCLING	640-1	494 (500-1)	640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

BALTIMORE, MARYLAND

AL-804 (FAA)

LOC I-BAL	APP CRS	Rwy Idg	9952
109.7	105°	TDZE	143
		Apt Elev	146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

ILS RWY 10 (CAT II)

DME Required.

ALSF-2

MISSED APPROACH: Climb to 2500 via BAL R-105 to HURTZ/BAL 12.1 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED

117.9 EMI Chan 126

R-127

R-025

1549

ENSUE EMI 23.1

113.7 OTT Chan 84

ALTERNATE MISSED APCH FIX

117.9 EMI Ch 126

307°

127°

R-025

R-127

ENSUE EMI 23.1

113.7 OTT Ch 84

1504

670

731

961

685

604

281±

340

281

245±

242±

741

1500

285°

105°

(6.1)

555

(IF) COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

MM

IM

290

372

560

LOCALIZER 109.7 I-BAL

BALTIMORE 115.1 BAL Chan 98

105°

285°

R-105

HURTZ BAL 12.1 RADAR

533

10 NM

MSA BAL 25 NM

2600

090°

2100

360°

1049

ELEV 146

D

289±

260

256±

170

262

167

285

162

10502 X 200

9501 X 150

9000 X 150

5000 X 100

0.5% UP

TDZE 143

227

189

250

10

28

33R

33L

COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

1500

2000

105°

1500

MM

IM

DH RA 104

143 MSL

GS 3.00°

TCH 55

2500

BAL R-105 115.1

HURTZ BAL 12.1 RADAR

6.1 NM | 3.6 NM | 0.3 NM | 893' | 1014'

CATEGORY	A	B	C	D
S-ILS 10	RA 104/12 100 DA 243			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

NE-3. 17 DEC 2009 to 14 JAN 2010

BALTIMORE, MARYLAND

AL-804 (FAA)

LOC I-BAL	APP CRS	Rwy ldg	9952
109.7	105°	TDZE	143
		Apt Elev	146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

ILS RWY 10 (CAT III)

DME Required.

ALSF-2

MISSED APPROACH: Climb to 2500 via BAL R-105 to HURTZ/BAL 12.1 DME/RADAR and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED

117.9 EMI Chan 126

R-127

R-025

1549

ENSUE EMI 23.1

113.7 OTT Chan 84

ALTERNATE MISSED APCH FIX

117.9 EMI Ch 126

307°

127°

R-025

R-127

ENSUE EMI 23.1

113.7 OTT Ch 84

1504

670

731

961

685

604

281±

340

281

245±

242±

741

LOCALIZER 109.7 I-BAL

285°

1500

105°

(6.1)

555

(IF) COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

MM

IM

290

372

560

533

BALTIMORE 115.1 BAL Chan 98

R-105

105°

285°

HURTZ BAL 12.1 RADAR

10 NM

MSA BAL 25 NM

2600

090°

2100

360°

1049

ELEV 146

D

COLUM BAL 11.4 RADAR

JEANS BAL 5.3 RADAR

MM

355

IM

244

2000

1500

105°

GS 3.00°

TCH 55

143 MSL

2500

BAL R-105 115.1

HURTZ BAL 12.1 RADAR

6.1 NM | 3.6 NM | 2117′ | 918′ | 1014′

CATEGORY	A	B	C	D
S-ILS 10		CAT IIIa	RVR 07	
S-ILS 10		CAT IIIb	RVR 06	
S-ILS 10		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

289±

260

256±

170

15R

15L

5000 X 100

0.5% UP

262

9501 X 150

22

285

33R

167

150

162

10

10502 X 200

5000 X 100

28

TDZE 143

227

189

250

33L

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

NE-3. 17 DEC 2009 to 14 JAN 2010

LOC I-FND	APP CRS	Rwy Idg	9501
111.7	155°	TDZE	139
		Apt Elev	146

ILS RWY 15R

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

*RVR 1800 authorized with use of FD or AP or HUD to DA. DME from BAL VORTAC.

MALSR

MISSED APPROACH: Climb to 900, then climbing right turn to 2500 via BAL R-294 to DATED Int/BAL 14.9 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

†2700 when authorized by ATC.

MSA BAL 25 NM
2600
090°
2100
360°

IAF
WESTMINSTER
117.9 EMI
Chan 126

†4000
150°
(10.6)
335°
2500
155°
(5)
R-187
187°
070°
R-294
10 NM

BMORE
BAL 13.8
RADAR

BLABR
BAL 8.8
RADAR

DATED
BAL 14.9

BALTIMORE
115.1 BAL
Chan 98

LOCALIZER 111.7
I-FND

1549
1504
670
731
685
961
604
281±
340
242±
281
555
741
560
290
372
533

DME or RADAR REQUIRED

ELEV 146 D

155° 3.8 NM from FAF

TDZE 139

289± 260 256± 170 262 167 285 162 227 189 250

9501 X 150
10502 X 200
6000 X 100
0.5% UP

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

900	2500	BAL R-294 115.1	DATED

BMORE
BAL 13.8
RADAR

BLABR
BAL 8.8
RADAR

†4000
155°
2659
GS 3.00°
TCH 62
2500
BAL
1.3

†2700 when authorized by ATC.
#CIRCLING requires descent on glideslope to MDA.

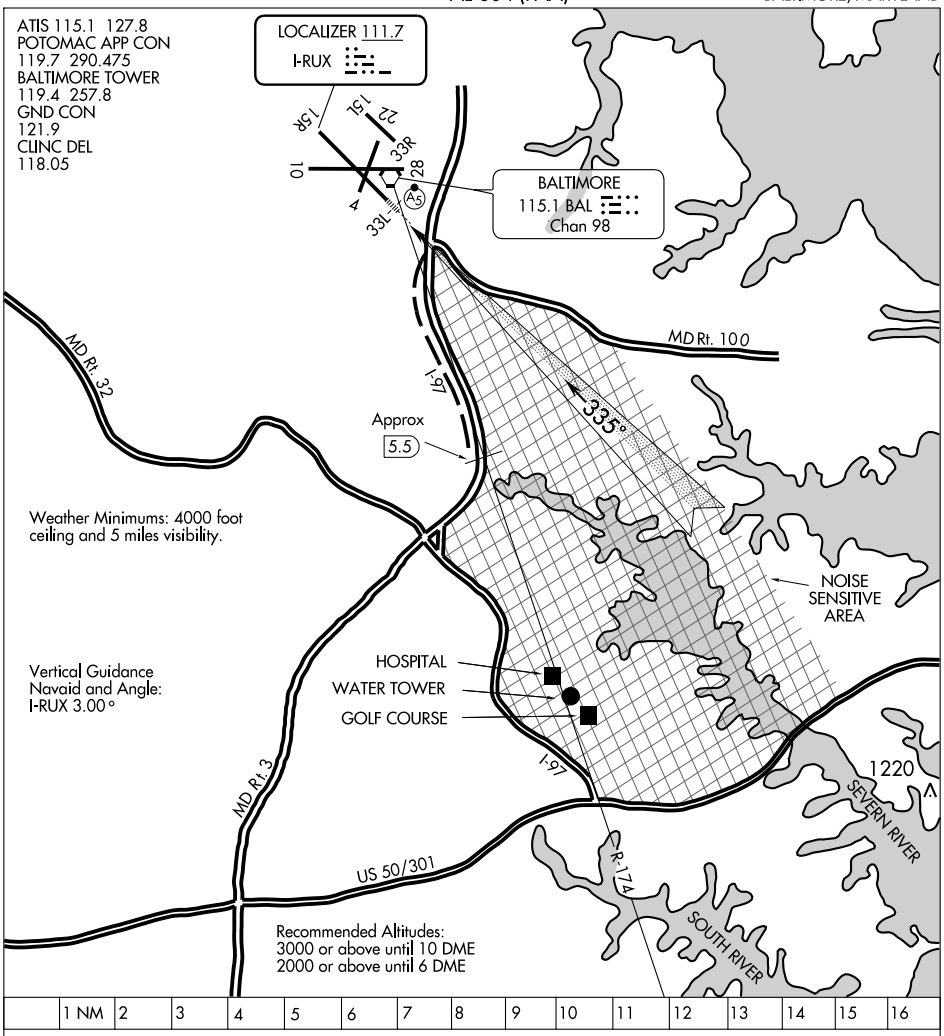
5 NM 7.5 NM

CATEGORY	A	B	C	D
S-ILS 15R	*339/24		200 (200-½)	
CIRCLING	720-1 574 (600-1)		720-1½ 574 (600-1½)	740-2 594 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

INTERSTATE VISUAL RWY 33L

WASHINGTON INTL THURGOOD MARSHALL (BWI)
AL-804 (FAA)
BALTIMORE, MARYLAND



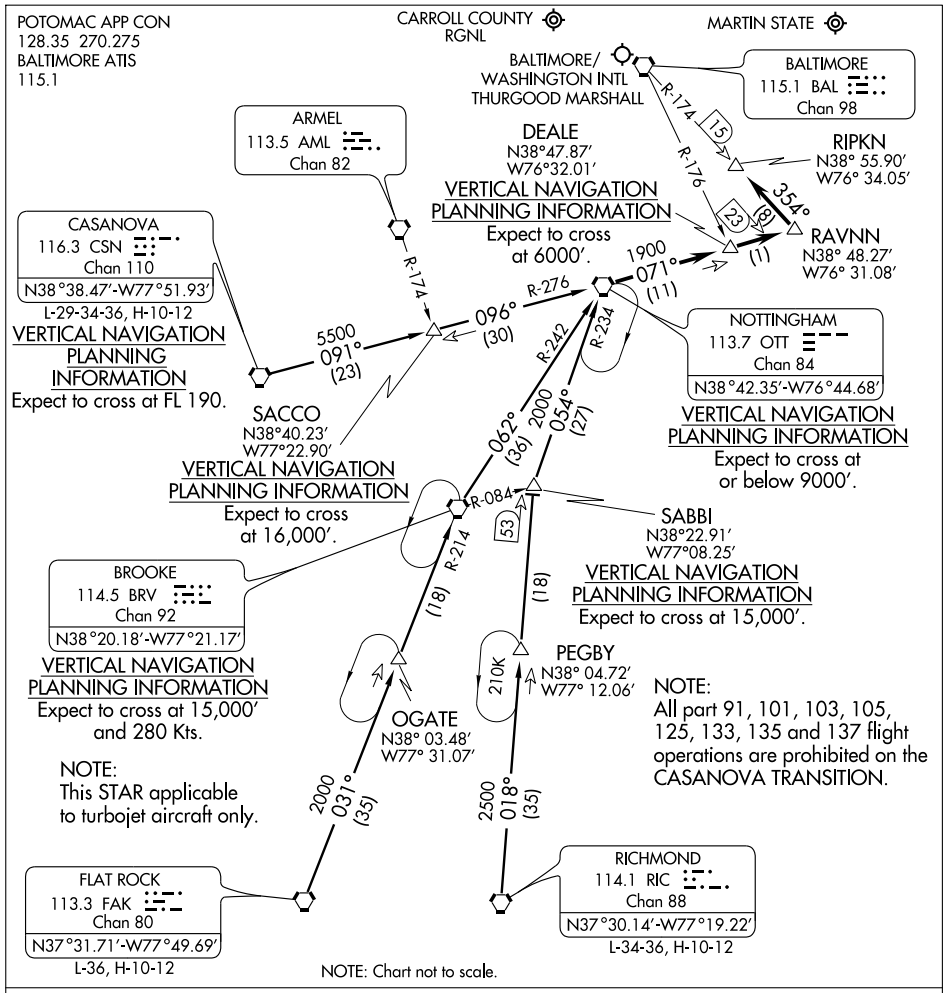
INTERSTATE VISUAL RWY 33L

Radar vectors will be provided to the BAL 174 RADIAL. When cleared for the Interstate Visual Runway 33L Approach, aircraft will proceed via the BAL 174 radial until over I-97 (Approx. 5.5 DME). Then via I-97 to join Runway 33L final approach course. Runway 33L ILS with MALSR will be on and available for use. Noise sensitive area east of I-97. This procedure applicable to turbo-jets arriving via OTT VORTAC.

(OTT.OTT6) 08101 ST-804 (FAA)

NOTTINGHAM SIX ARRIVAL

BALTIMORE, MARYLAND



ARRIVAL ROUTE DESCRIPTION

CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence . . . .

FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence . . . .

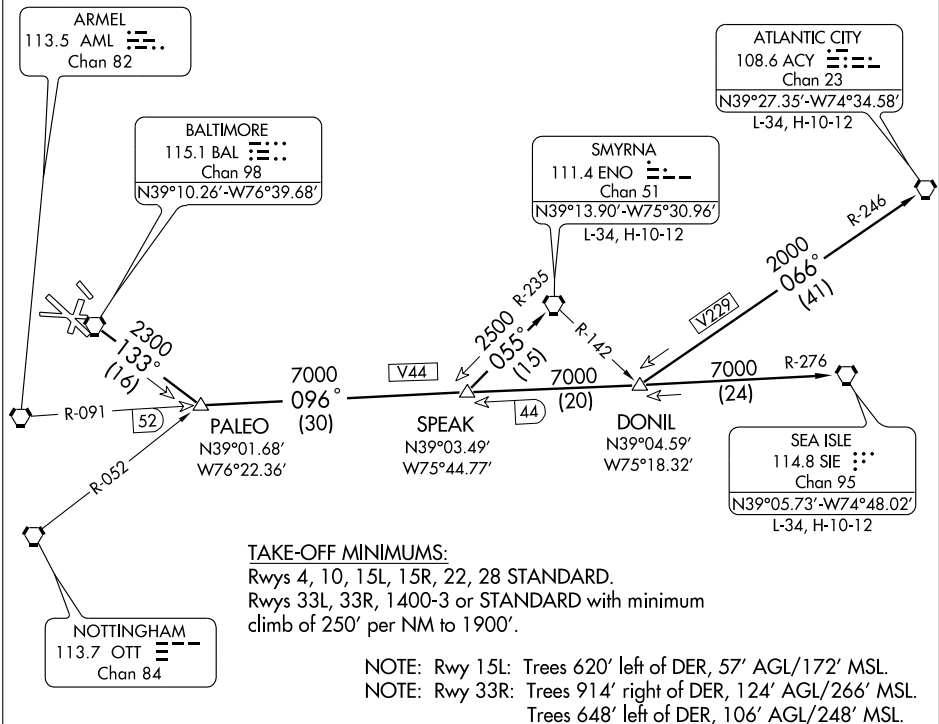
RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence . . . . . From over OTT VORTAC via OTT R-071 to RAVNN INT, then via BAL R-174 to RIPKN INT. Expect radar vectors to final approach course after passing RIPKN INT.

NE-3, 17 DEC 2009 to 14 JAN 2010

PALEO THREE DEPARTURE

BALTIMORE/
WASHINGTON INTL THURGOOD MARSHALL (BWI)
SL-804 (FAA)
BALTIMORE, MARYLAND

ATIS 115.1 127.8
CLNC DEL 118.05
GND CON 121.9
BALTIMORE TOWER
119.4 257.8



TAKE-OFF MINIMUMS:
Rwys 4, 10, 15L, 15R, 22, 28 STANDARD.
Rwys 33L, 33R, 1400-3 or STANDARD with minimum climb of 250' per NM to 1900'.

NOTE: Rwy 15L: Trees 620' left of DER, 57' AGL/172' MSL.
NOTE: Rwy 33R: Trees 914' right of DER, 124' AGL/266' MSL.
Trees 648' left of DER, 106' AGL/248' MSL.
NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 28:
JETS: Fly runway heading until 3 DME, then turn left heading 150°. Thence . . . .
PROPS: Fly runway heading. Thence . . . .
TAKE-OFF ALL OTHER RUNWAYS: Fly runway heading. Thence . . . .
. . . . For vectors to transition or assigned route, expect clearance to filed altitude ten minutes after departure.

ATLANTIC CITY TRANSITION (PALEO3.ACY): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to DONIL INT, then via ACY VORTAC R-246 to ACY VORTAC.

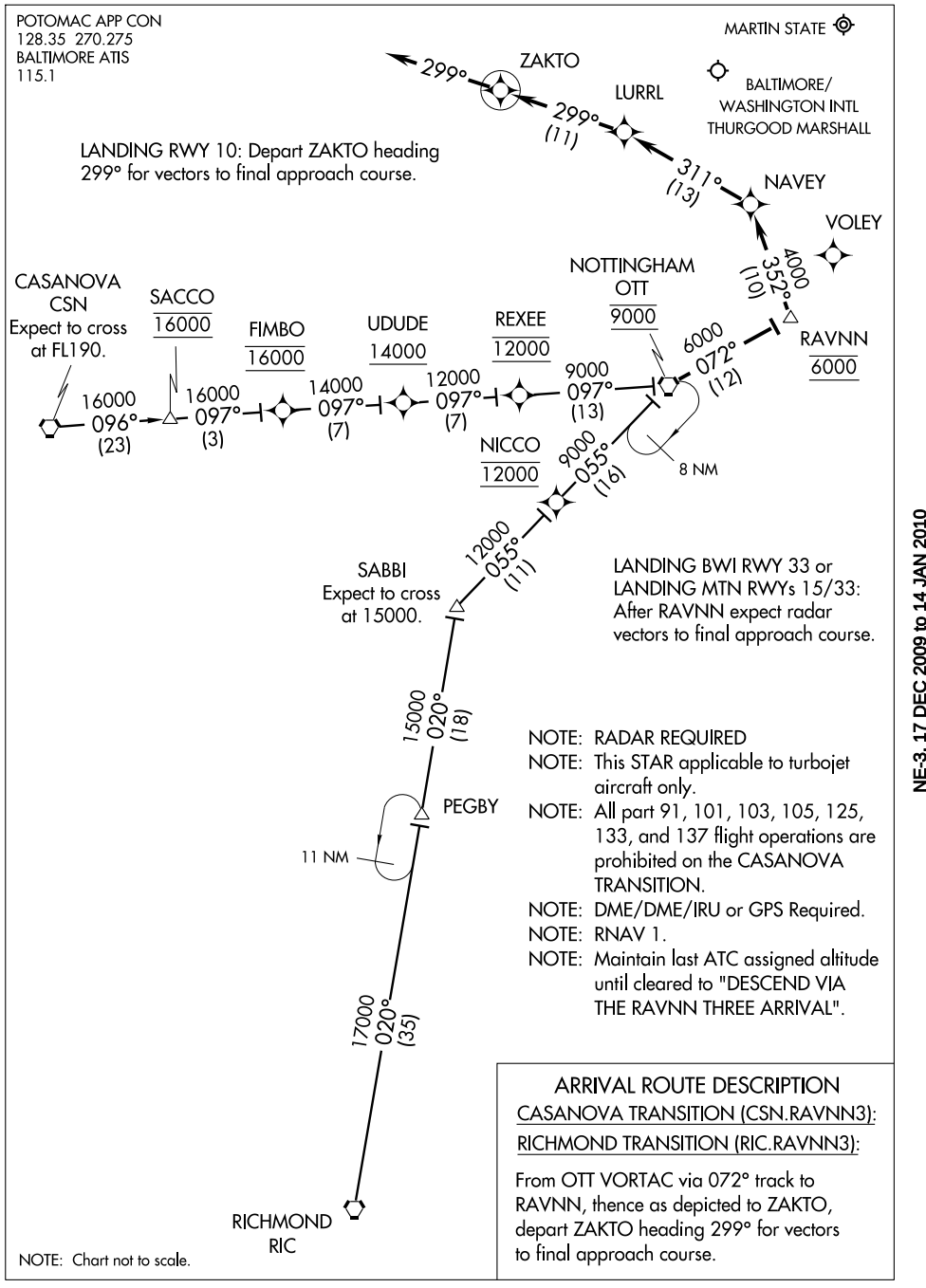
SEA ISLE TRANSITION (PALEO3.SIE): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to SIE VORTAC.

SMYRNA TRANSITION (PALEO3.ENO): From over BAL VORTAC via BAL R-133 to PALEO INT, then via SIE VORTAC R-276 to SPEAK INT, then via ENO VORTAC R-235 to ENO VORTAC.

NE-3, 17 DEC 2009 to 14 JAN 2010

RAVNN THREE ARRIVAL (RNAV)

BALTIMORE, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	6000
058°	TDZE	146
	Apt Elev	146

RNAV (GPS) RWY 4

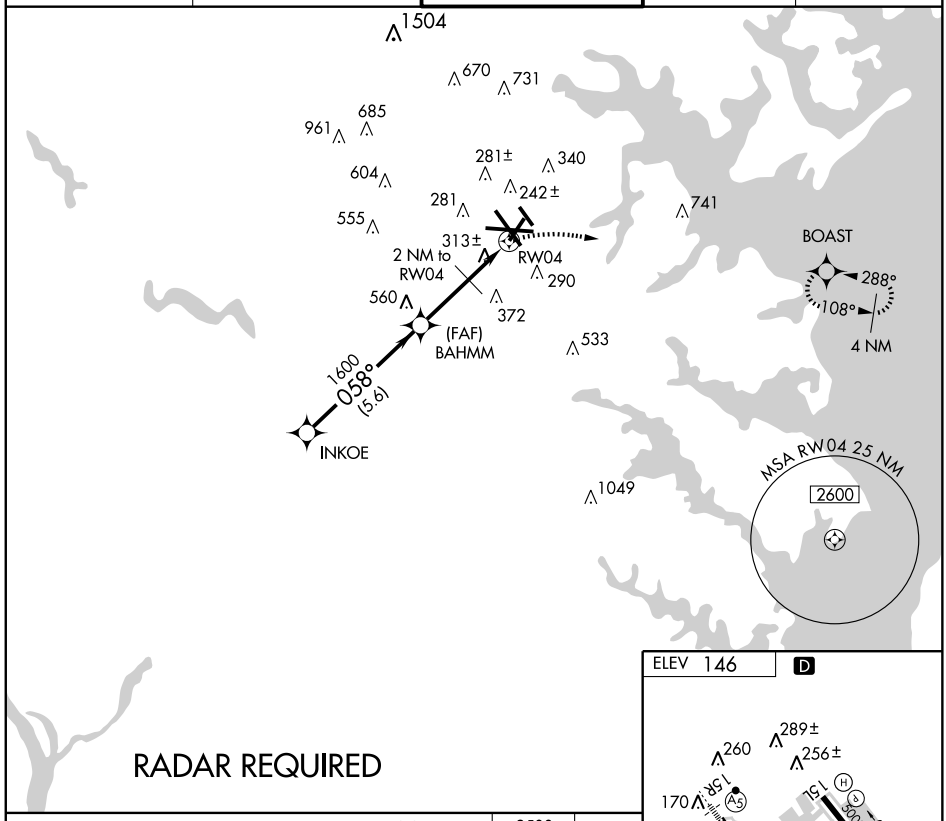
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

NA

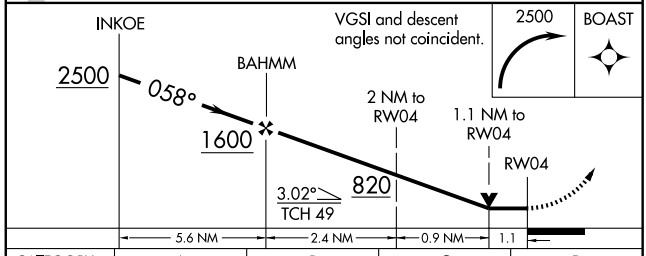
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2500 direct BOAST WP and hold.

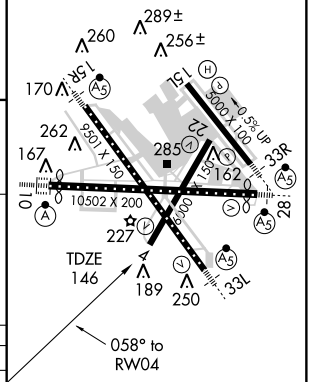
ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05



RADAR REQUIRED



CATEGORY	A	B	C	D
LNAV MDA	540-1 394 (400-1)			540-1¼ 394 (400-1¼)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

NE-3. 17 DEC 2009 to 14 JAN 2010

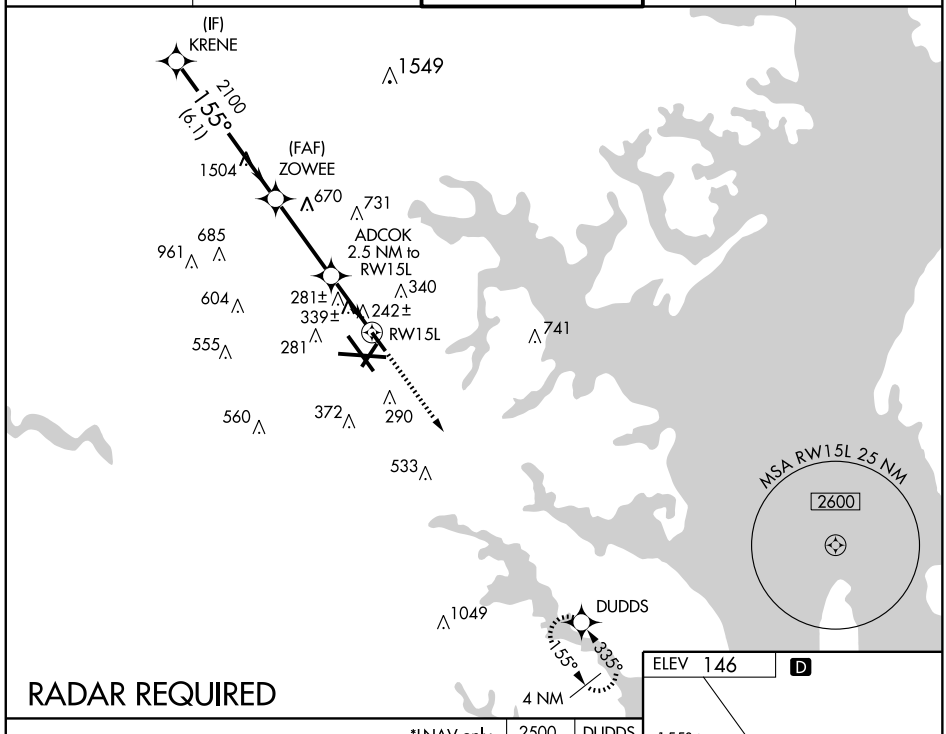
WAAS	APP CRS	Rwy Idg	5000
CH 40108	155°	TDZE	142
W15A		Apt Elev	146

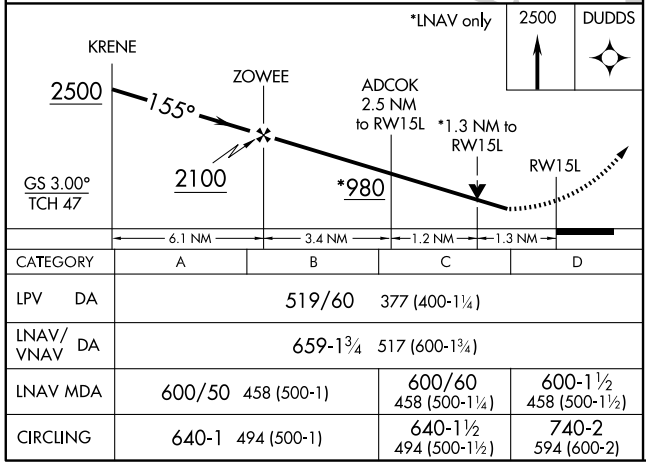
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) RNAV (GPS) RWY 15L

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

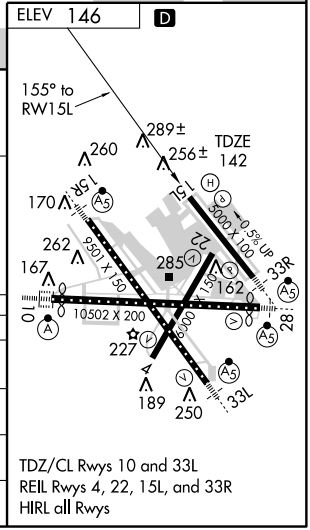
MISSED APPROACH: Climb to 2500 direct DUDDS and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05





CATEGORY	A	B	C	D
LPV DA	519/60 377 (400-1¼)			
LNAV/ VNAV DA	659-1¾ 517 (600-1¾)			
LNAV MDA	600/50 458 (500-1)		600/60 458 (500-1¼)	600-1½ 458 (500-1½)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all Rwys

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	6000
224°	TDZE	143
	Apt Elev	146

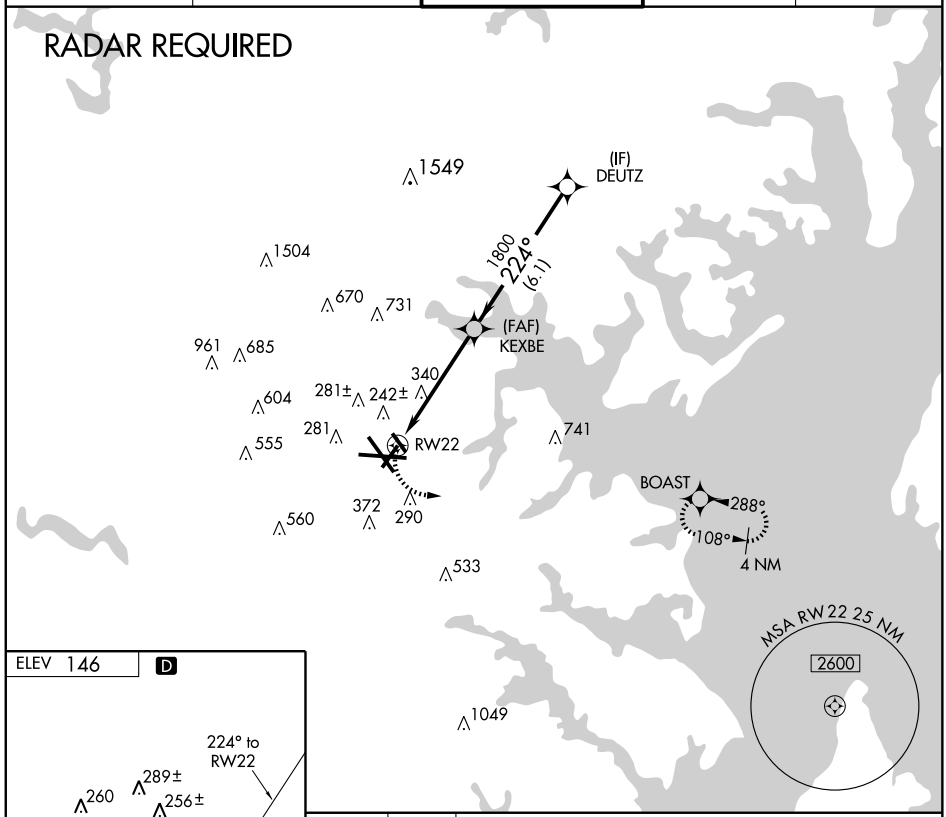
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) RNAV (GPS) RWY 22

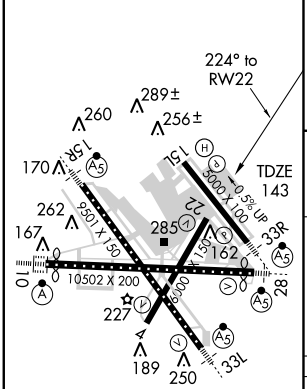
Visibility reduction by helicopters NA.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2500 direct BOAST and hold.

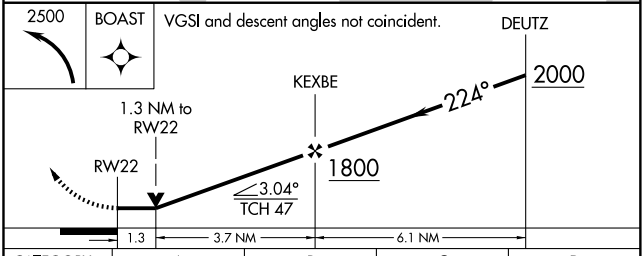
ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED





TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys



CATEGORY	A	B	C	D
LNAV MDA	600-1 457 (500-1)		600-1¼ 457 (500-1¼)	600-1½ 457 (500-1½)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS CH 69208 W33B	APP CRS 335°	Rwy Idg 5000 TDZE 124 Apt Elev 146

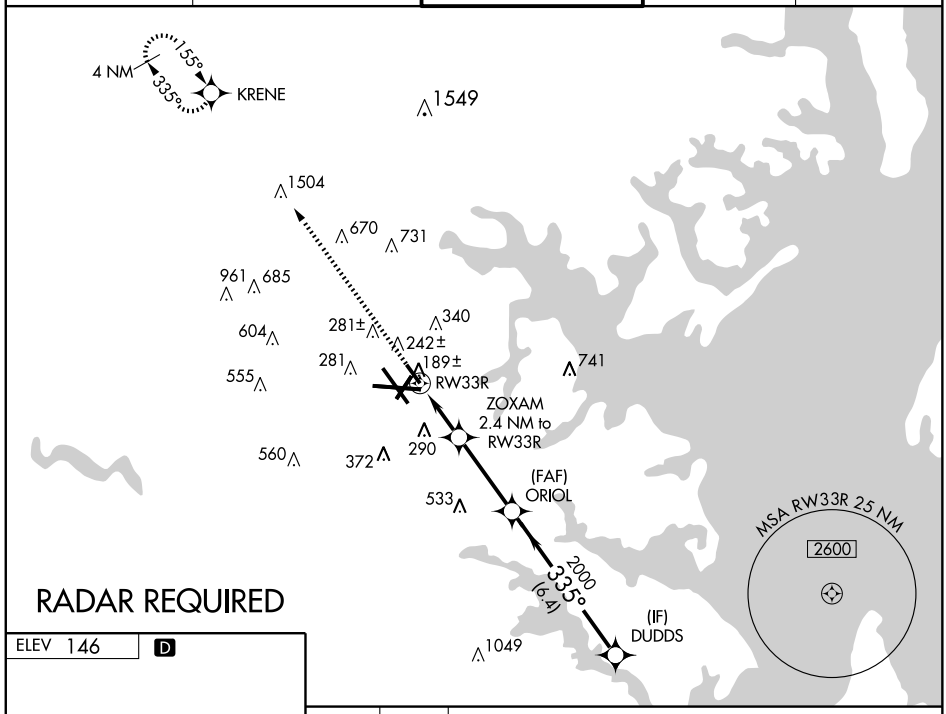
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) RNAV (GPS) RWY 33R

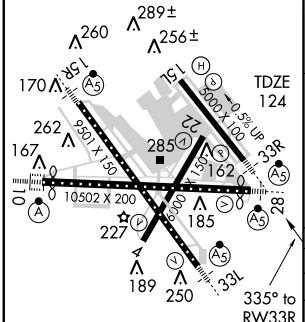
For inoperative MALSR, increase LPV visibility to RVR 5000 all Cats.
For uncompensated Baro-VNAV systems, LNAV/ VNAV NA below -15°C (5°F) or above 48°C (118°F).
DME/DME RNP -0.3 NA.

MALSR

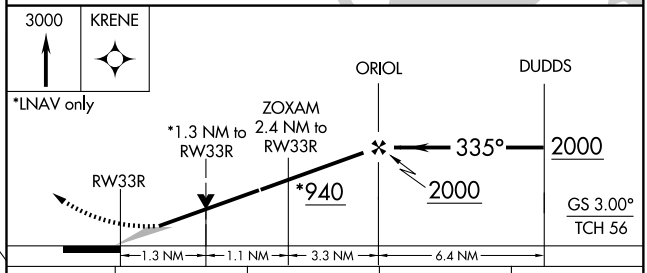
MISSED APPROACH: Climb to 3000 direct KRENE and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05





TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all Rwys



CATEGORY	A	B	C	D
LPV DA	392/24 268 (300-½)			
LNAV/ VNAV DA	518/50 394 (400-1)			
LNAV MDA	580/24 456 (500-½)		580/40 456 (500-¾)	580/50 456 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	9952
CH 53707	105°	TDZE	143
W10A		Apt Elev	146

RNAV (GPS) Y RWY 10

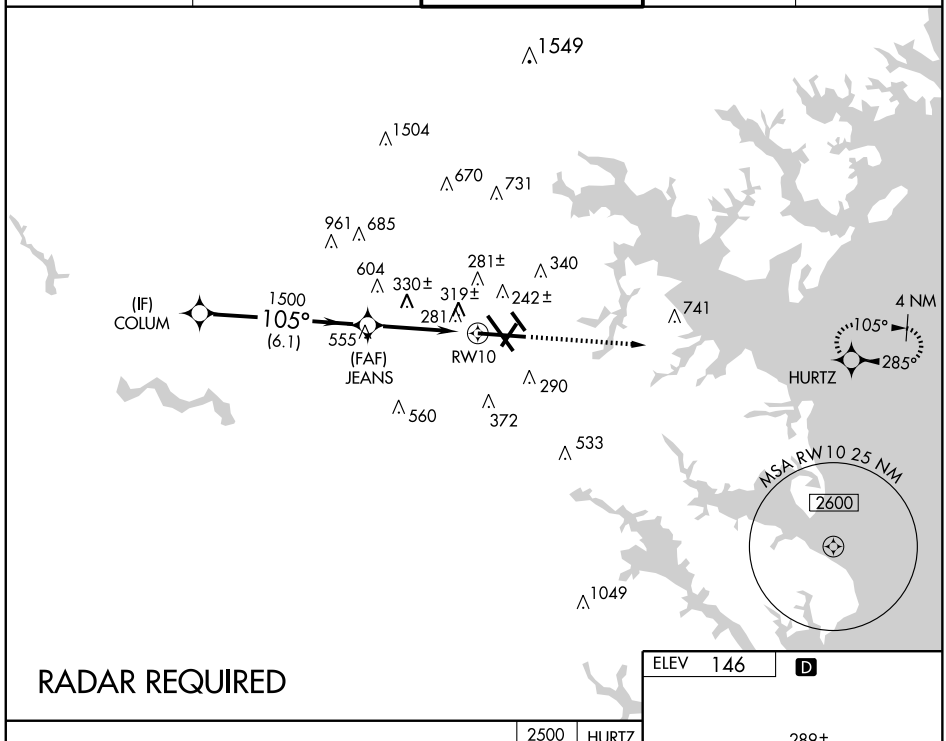
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

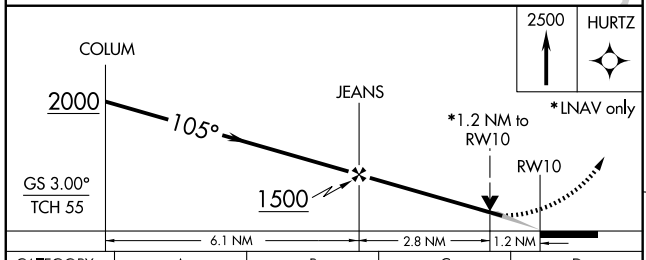
ALSF-2

MISSED APPROACH: Climb to 2500 direct HURTZ and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

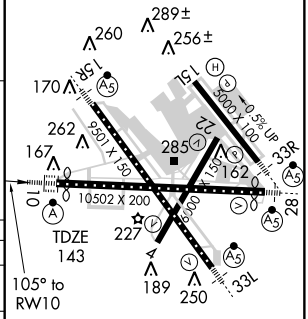


RADAR REQUIRED



CATEGORY	A	B	C	D
LPV DA	343/24 200 (200-½)			
LNAV/VNAV DA	634/60 491 (500-1¼)			
LNAV MDA	580/24 437 (500-½)		580/40 437 (500-¾)	580/50 437 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

ELEV 146 D



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	9501
CH 66007	155°	TDZE	139
W15B		Apt Elev	146

RNAV (GPS) Y RWY 15R

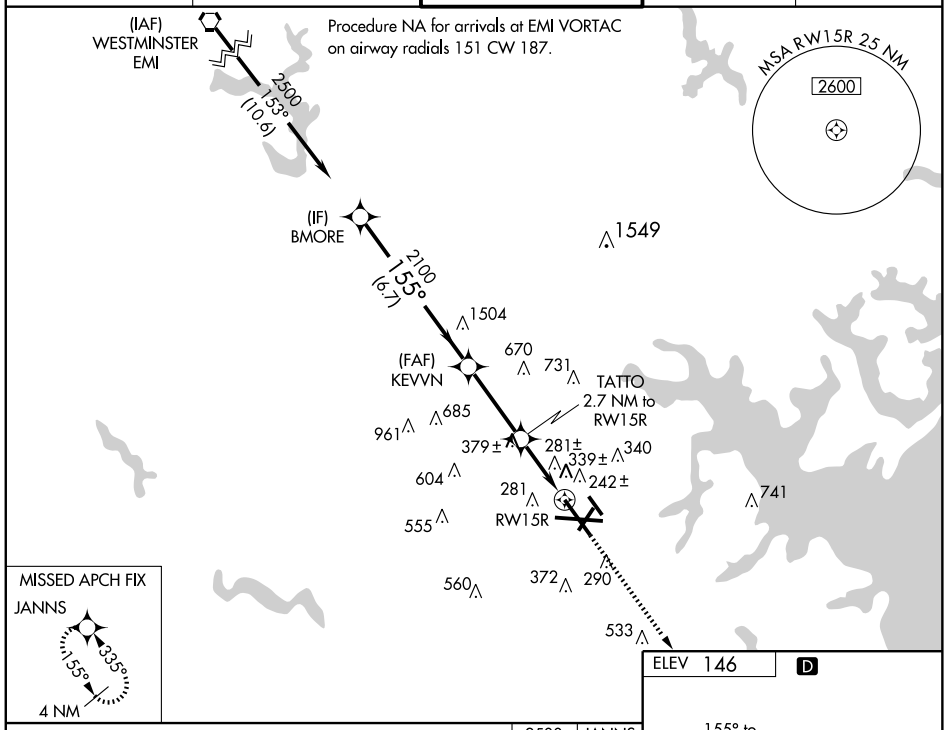
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

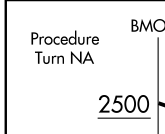
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

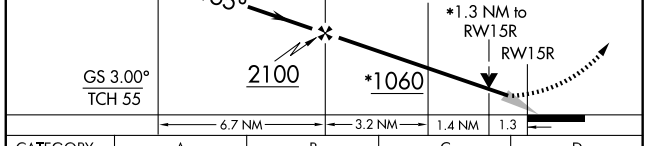
MALSR

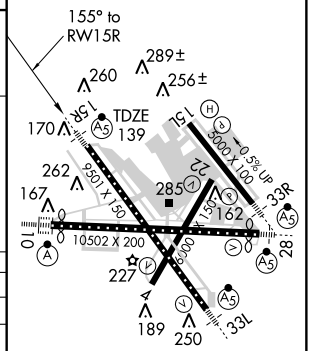
MISSED APPROACH: Climb to 2500 direct JANNS and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05









CATEGORY	A	B	C	D
LPV DA	339/24 200 (200-½)			
LNAV/VNAV DA	659/60 520 (600-1¼)			
LNAV MDA	600/24 461 (500-½)		600/40 461 (500-¾)	600/50 461 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	10002
CH 48808	285°	TDZE	142
W28A		Apt Elev	146

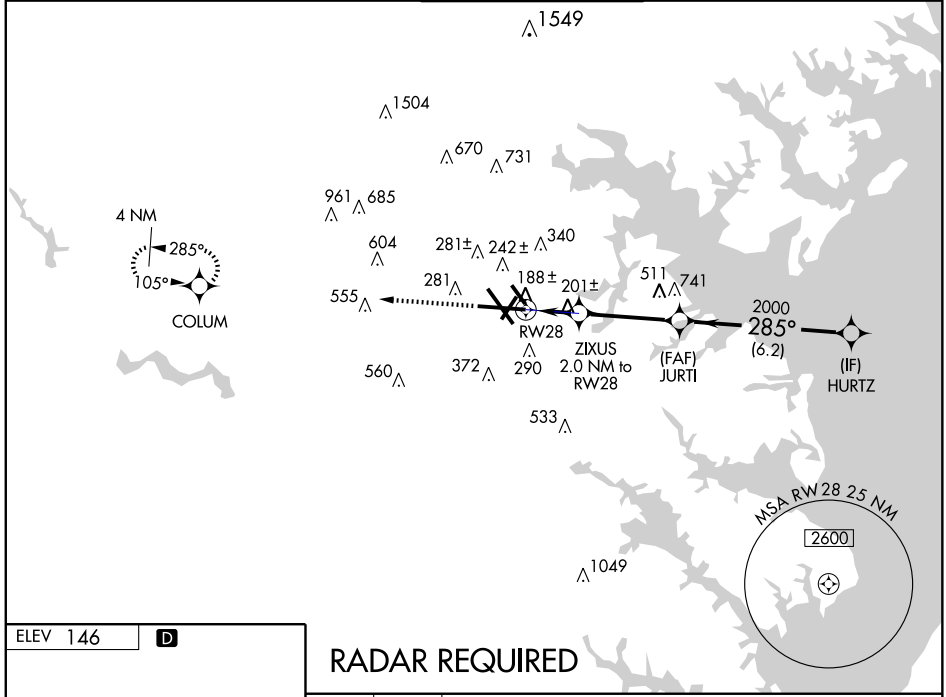
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) RNAV (GPS) Y RWY 28

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). Inoperative table does not apply to LNAV Cat D. DME/DME RNP-0.3 NA.

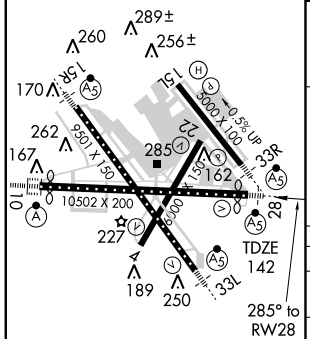
MALSR

MISSED APPROACH: Climb to 2500 direct COLUM and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

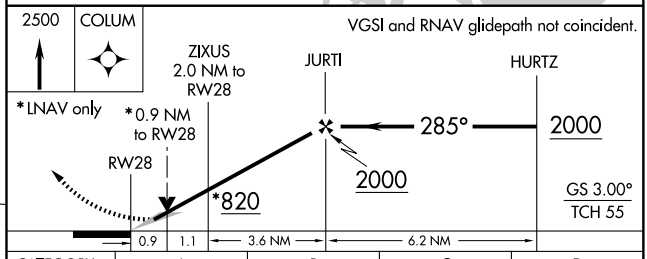


ELEV 146 D



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

RADAR REQUIRED



CATEGORY	A	B	C	D
LPV DA	342/24 200 (200-½)			
LNAV/ VNAV DA	567/50 425 (500-1)			
LNAV MDA	480/24 338 (400-½)			480/50 338 (400-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS CH 82207 W33A	APP CRS 335°	Rwy Idg 9501 TDZE 142 Apt Elev 146

RNAV (GPS) Y RWY 33L

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

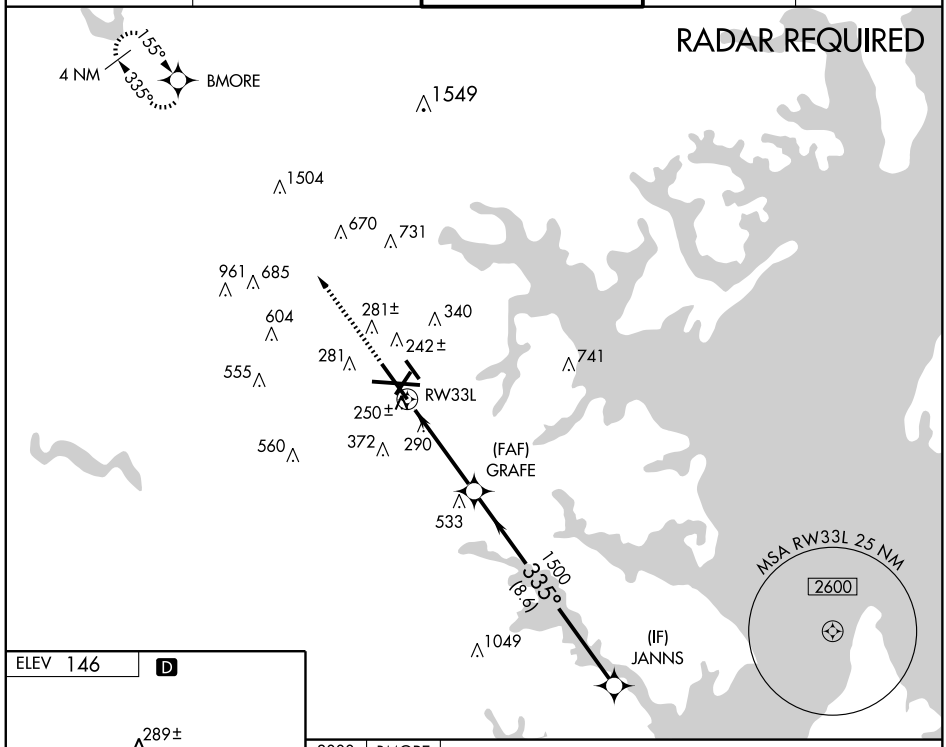
For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP-0.3 NA.

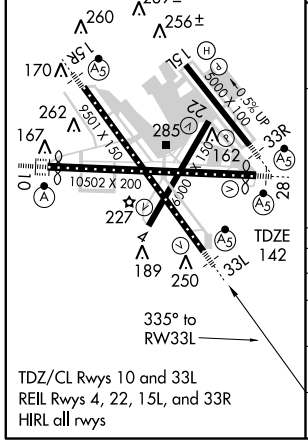
MALSR

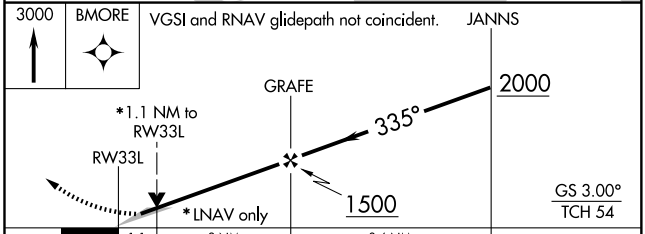
MISSED APPROACH: Climb to 3000 direct BMORE and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED







CATEGORY	A	B	C	D
LPV DA	342/24 200 (200-½)			
LNAV/ VNAV DA	510/40 368 (400-¾)			
LNAV MDA	540/24 398 (400-½)			540/50 398 (400-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	9952
105°	TDZE	143
	Apt Elev	146

RNAV (RNP) Z RWY 10

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

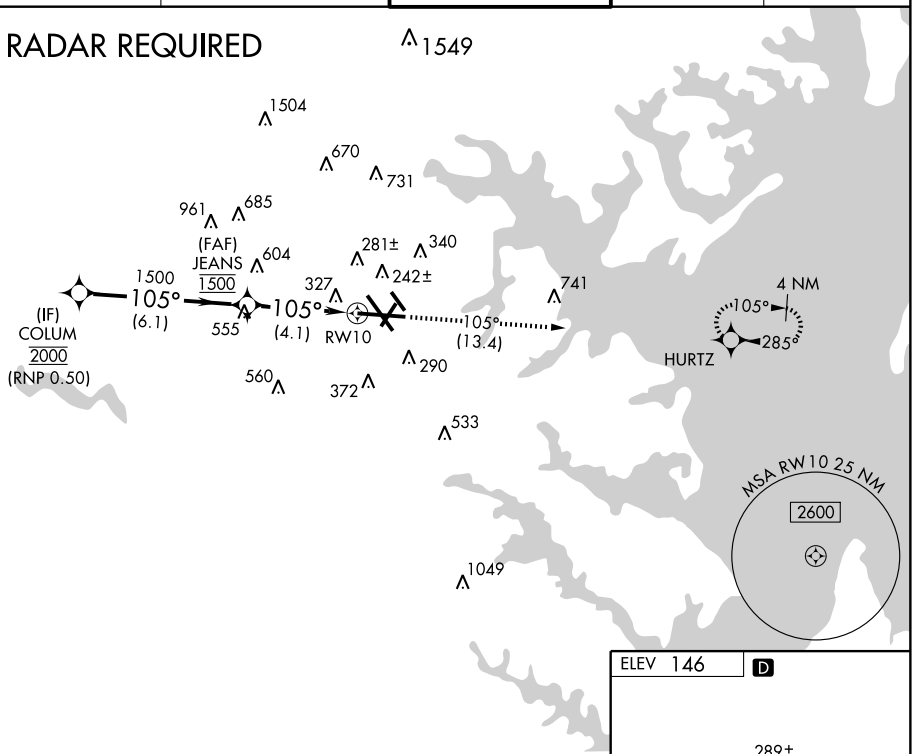
For uncompensated Baro-VNAV systems, procedure NA below -13°C (9°F) or above 48°C (118°F). GPS Required.
For inoperative ALSF-2, increase RNP 0.30 all Cats visibility to 1¾.

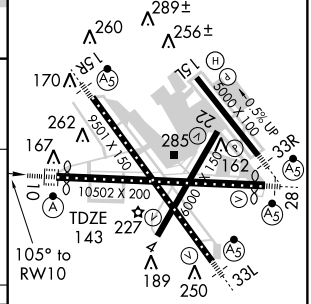
ALSF-2

MISSED APPROACH: Climb to 2500 via track 105° to HURTZ and hold.

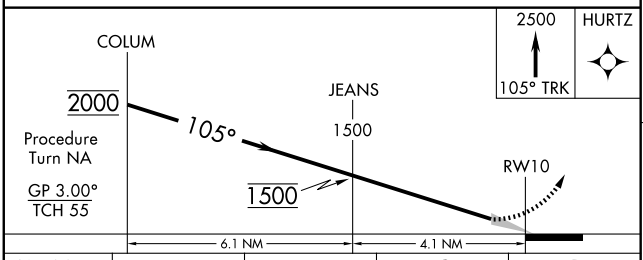
ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

RADAR REQUIRED





TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys



CATEGORY	A	B	C	D
RNP 0.30 DA	660/60	517 (600-1¼)		

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	9501
155°	TDZE	139
	Apt Elev	146

RNAV (RNP) Z RWY 15R

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

GPS Required. For uncompensated Baro-VNAV systems, procedure NA below -13°C (9°F) or above 48°C (118°F). Visibility reduction by helicopters NA. For inoperative MALSR, increase RNP 0.20 all Cats visibility to 1½, and RNP 0.30 all Cats visibility to 1¾.

MALSR

MISSED APPROACH: Climb to 2500 via track 155° and JANNS and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

(IAF)
WESTMINSTER
EMI
4000
(RNP 0.50)

Procedure NA for arrivals at EMI VORTAC on airway radials 151 CW 187.

2500
153°
(10.6)

(IF)
BMORE
2500

2100
155°
(6.7)

(FAF)
KEVVN
2100

155°
(5.9)

155°
(14.3)

MSA RW15R 25 NM
2600

RW15R

MISSED APCH FIX
JANNS
155°
335°
4 NM

2500
155° TRK
JANNS

BMORE
2500
Procedure Turn NA
GP 3.00°
TCH 55

KEVVN
2100

155°

2100

RW15R

6.7 NM
5.9 NM

CATEGORY	A	B	C	D
RNP 0.20 DA	582/50 443 (500-1)			
RNP 0.30 DA	640/60 501 (500-1¼)			

ELEV 146 D

155° to RW15R

TDZE
139

9501 X 150
10502 X 200
6000 X 100
0.5% UP

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	10002
285°	TDZE	142
	Apt Elev	146

RNAV (RNP) Z RWY 28

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL (BWI)

For inoperative MALSR, increase RNP 0.30 all Cats visibility to RVR 6000. GPS Required. For uncompensated Baro-VNAV systems, procedure NA below -13°C (9°F) or above 48°C (118°F).

MALSR

MISSED APPROACH: Climb to 2500 via track 285° to COLUM and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

MISSED APCH FIX
4 NM
285°
105°
COLUM

1504 670 731 685 961 604 281± 340 242± 281± 137 741 555 285° (11.6) RW28 285° (5.6) 2000 285° (6.2) (IF) HURTZ 2000 (FAF) JURTI 2000 560 372 290 533 1049

2000 338° (11)

MSA RW28 25 NM
2600

ZUKBU

2000 to HURTZ 338° (28.9)

2000 055° (16.6)

(IAF) BILIT 11000 250 KTS (RNP 0.50)

Procedure NA for arrivals at RAVNN via V379 Westbound.

(IAF) RAVNN 6000

ELEV 146 D

289± 260 256± 170 262 167 285 162 227 189 250 TDZE 142 285° to RW28

9501 X 150 10502 X 200 9000 X 100 ~0.5% UP

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

2500 COLUM 285° TRK

JURTI 2000 285° 2000 HURTZ 2000 Procedure Turn NA

RW28 2000

VGSI and RNAV glidepath not coincident.

GP 3.00° TCH 55

5.6 NM 6.2 NM

CATEGORY	A	B	C	D
RNP 0.30 DA	493/40 351 (400-¾)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	9501
335°	TDZE	142
	Apt Elev	146

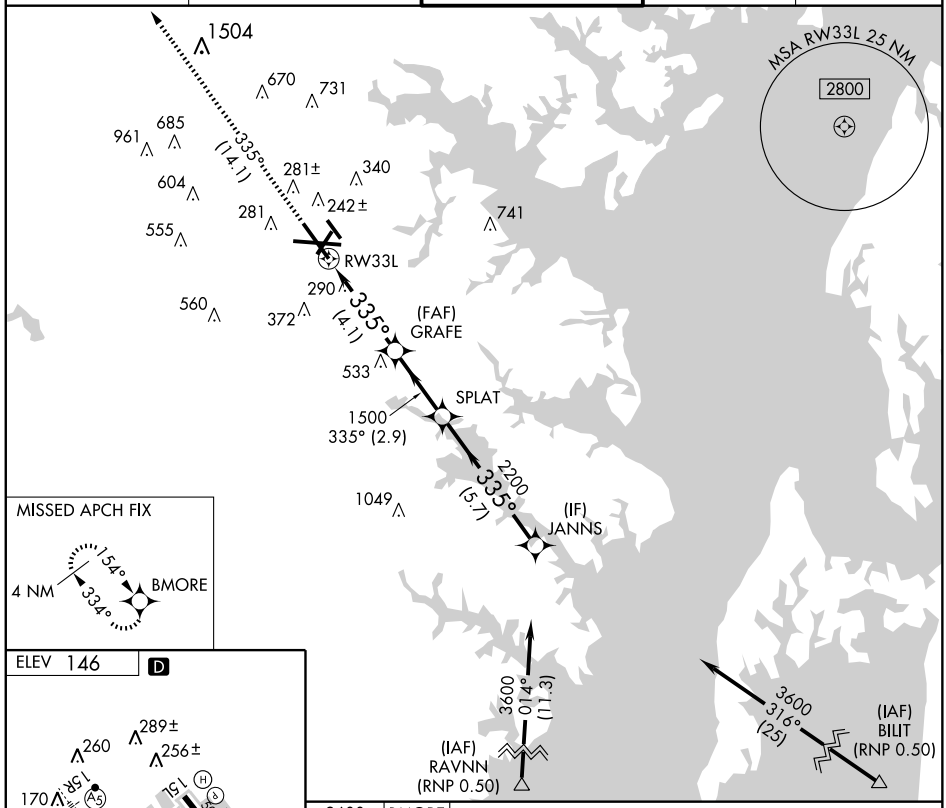
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) RNAV (RNP) Z RWY 33L

GPS Required. For uncompensated Baro-VNAV systems, procedure NA below -12°C (10°F) or above 48°C (118°F). For inoperative MALSR, increase RNP 0.30 visibility to RVR 6000.

MALSR

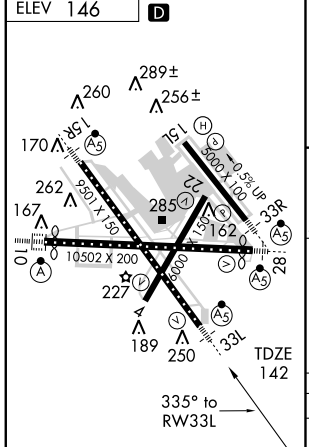
MISSED APPROACH: Climb to 2600 via track 335° to BMORE and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

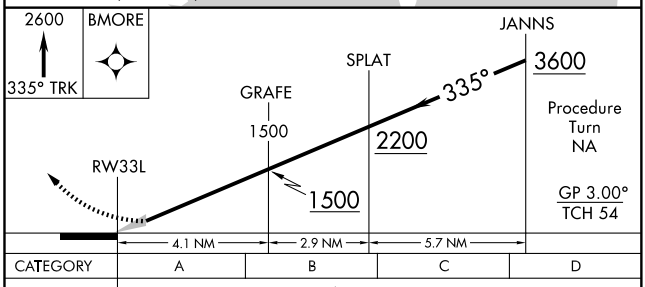


MISSED APCH FIX

ELEV 146 D



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys



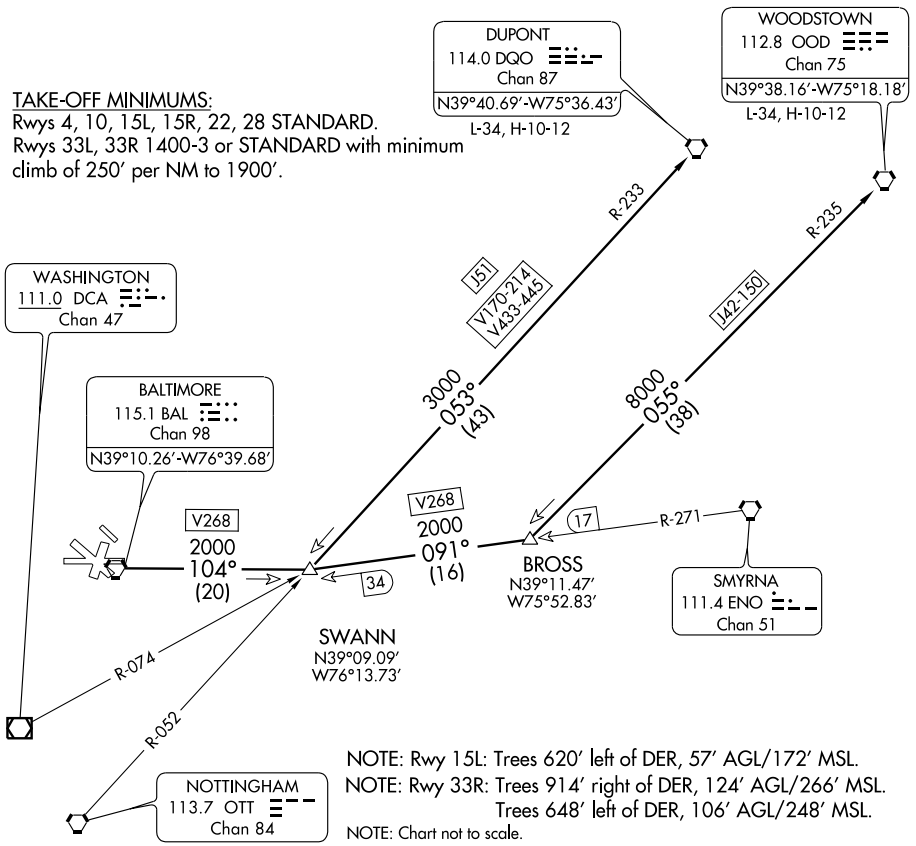
CATEGORY	A	B	C	D
RNP 0.30 DA	476/40 334 (400-¾)			

SPECIAL AIRCRAFT & AIRCREW AUTHORIZATION REQUIRED

NE-3. 17 DEC 2009 to 14 JAN 2010

ATIS 115.1 127.8
CLNC DEL 118.05
GND CON 121.9
BALTIMORE TOWER
119.4 257.8

TAKE-OFF MINIMUMS:
Rwys 4, 10, 15L, 15R, 22, 28 STANDARD.
Rwys 33L, 33R 1400-3 or STANDARD with minimum climb of 250′ per NM to 1900′.



NOTE: Rwy 15L: Trees 620′ left of DER, 57′ AGL/172′ MSL.
NOTE: Rwy 33R: Trees 914′ right of DER, 124′ AGL/266′ MSL.
Trees 648′ left of DER, 106′ AGL/248′ MSL.
NOTE: Chart not to scale.

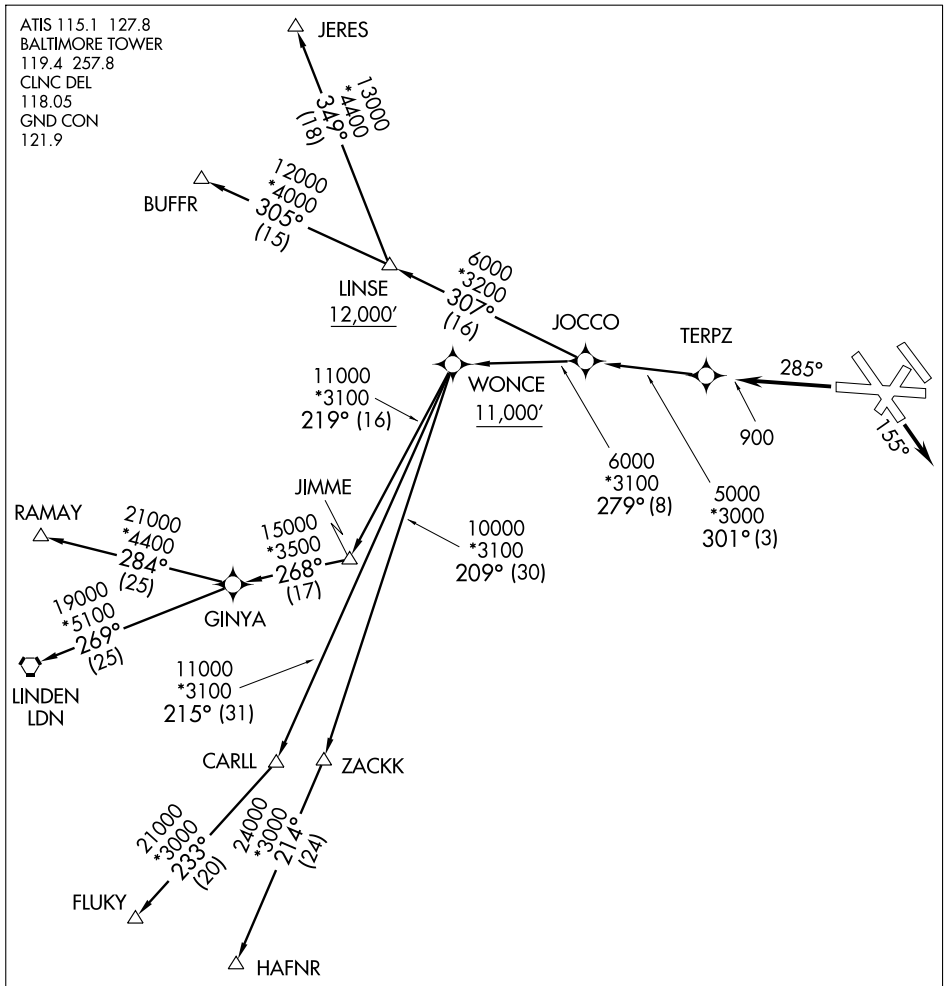
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 28:
JETS: Fly runway heading until 3 DME, then turn left heading 150° Thence....
PROPS: Fly runway heading. Thence....
TAKE-OFF ALL OTHER RUNWAYS: Fly runway heading. Thence....
....For vectors to transition or assigned route, expect clearance to filed altitude ten minutes after departure.
DUPONT TRANSITION (SWANN3.DQO): From over BAL VORTAC via BAL R-104 to SWANN INT, then via DQO VORTAC R-233 to DQO VORTAC.
WOODSTOWN TRANSITION (SWANN3.OOD): From over BAL VORTAC via BAL R-104 to SWANN INT, then via ENO VORTAC R-271 to BROSS INT, then via OOD VORTAC R-235 to OOD VORTAC.

(TERPZ1.TERPZ) 07298 SL-804 (FAA)

BALTIMORE/
WASHINGTON INTL THURGOOD MARSHALL (BWI)
BALTIMORE, MARYLAND

TERPZ ONE DEPARTURE (RNAV)



TAKE-OFF OBSTACLES:
Rwy 28: Tree 1392' from DER, 736' left of centerline, 77' AGL/176' MSL.
Rwy 15R: Multiple Trees beginning 1144' from DER, 740' right of centerline, up to 53' AGL/172' MSL.

NOTE: DME/DME/IRU or GPS Required.
NOTE: RNAV 1.

NOTE: RADAR required.
NOTE: Maintain 250 Kias to TERPZ.

TAKE-OFF MINIMUMS:
Rwys 4, 10, 15L, 28, 33L, 33R: NA - Air Traffic.
Rwys 15R/28: JERES, BUFFR TRANSITIONS:
STANDARD with ATC climb of 500' per NM to 12,000'.
Rwys 15R/28: RAMAY, LINDEN, FLUKY, HAFNR TRANSITIONS:
STANDARD with ATC climb of 500' per NM to 11,000'.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

NE-3, 17 DEC 2009 to 14 JAN 2010

TERPZ ONE DEPARTURE (RNAV)

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 15R: Fly heading 155°, or as assigned, for radar vectors to TERPZ, Thence. . . .
TAKE-OFF RUNWAY 28: Fly heading 285° to 900, for radar vectors to TERPZ, Thence. . . .

. . . . expect further clearance to filed altitude within 10 minutes after departure.

BUFFR TRANSITION (TERPZ1.BUFFR)
FLUKY TRANSITION (TERPZ1.FLUKY)
HAFNR TRANSITION (TERPZ1.HAFNR)
JERES TRANSITION (TERPZ1.JERES)
LINDEN TRANSITION (TERPZ1.LDN)
RAMAY TRANSITION (TERPZ1.RAMAY)

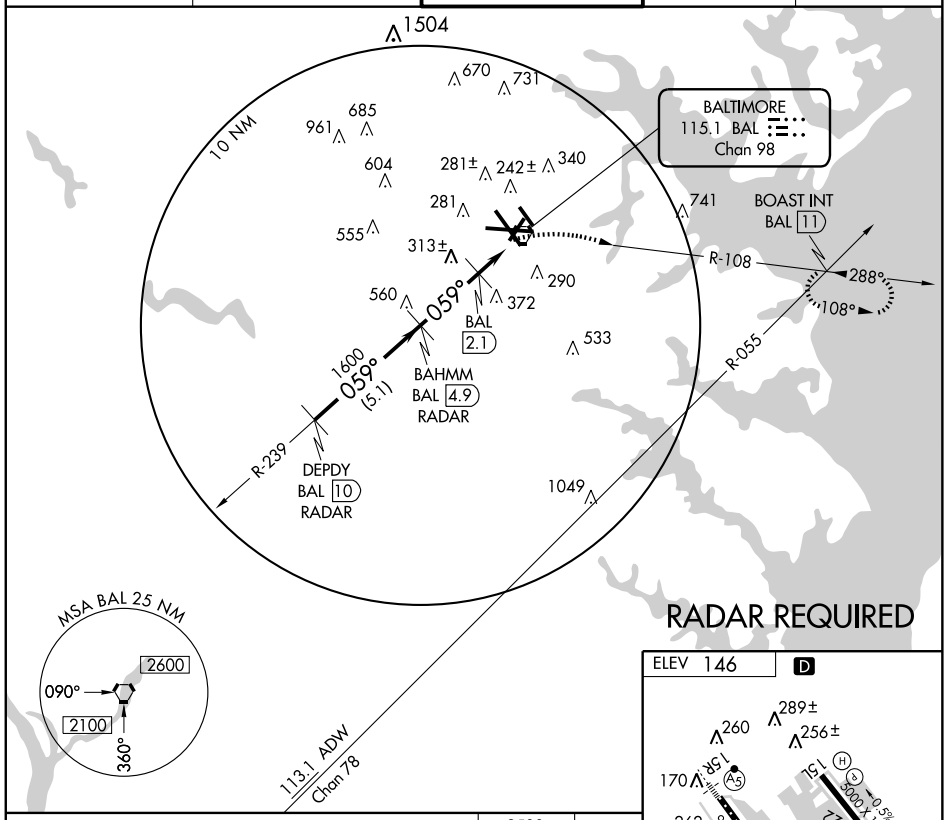
VORTAC BAL 115.1 Chan 98	APP CRS 059°	Rwy ldg 6000 TDZE 146 Apt Elev 146

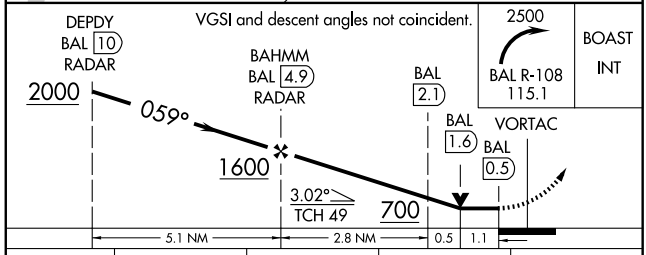
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

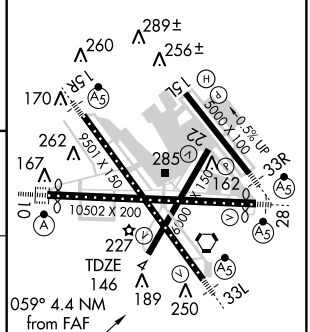
VOR/DME RWY 4

MISSED APPROACH: Climbing right turn to 2500 via BAL R-108 to BOAST Int/BAL 11 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05







CATEGORY	A	B	C	D
S-4	540-1 394 (400-1)			540-1¼ 394 (400-1¼)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

Knots	60	90	120	150	180
Min:Sec					

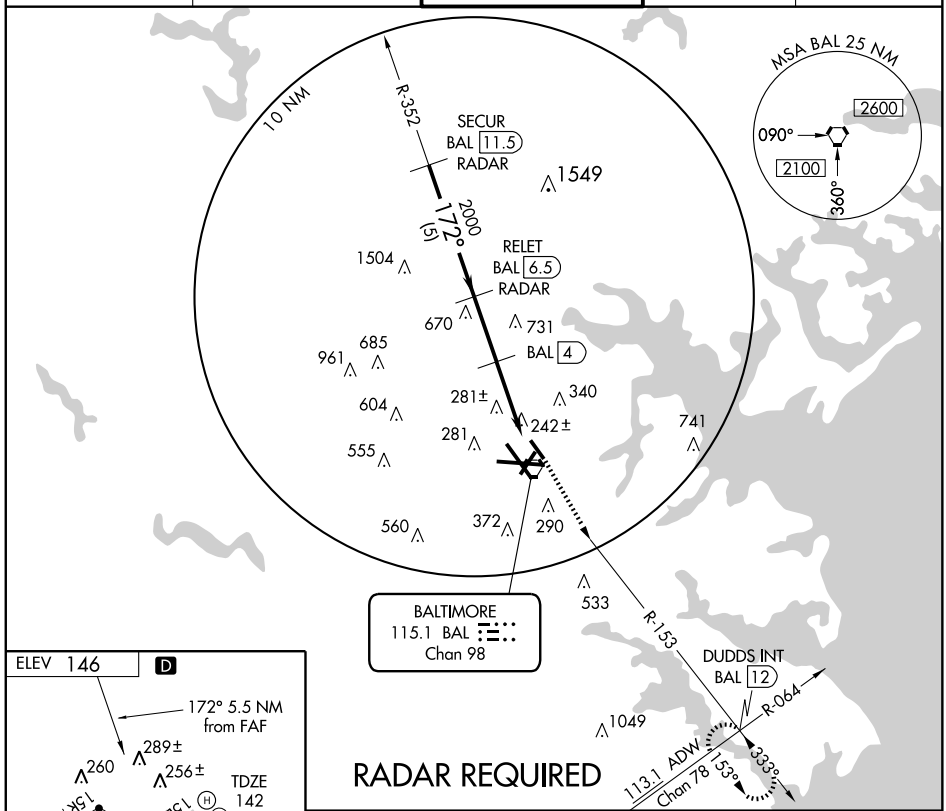
NE-3, 17 DEC 2009 to 14 JAN 2010

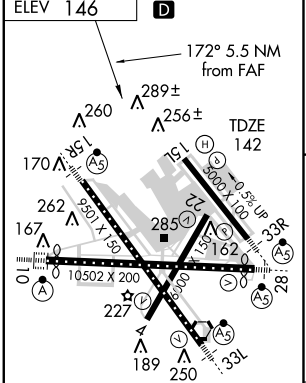
VORTAC BAL 115.1 Chan 98	APP CRS 172°	Rwy ldg 5000 TDZE 142 Apt Elev 146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) VOR/DME RWY 15L

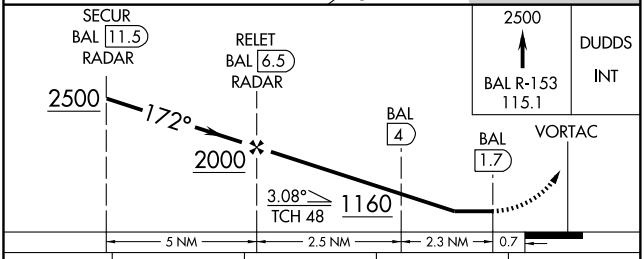
MISSED APPROACH: Climb to 2500 via BAL R-153 to DUDDS Int/BAL 12 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05





Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-15L	600/50 458 (500-1)		600/60 458 (500-1¼)	600-1½ 458 (500-1½)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

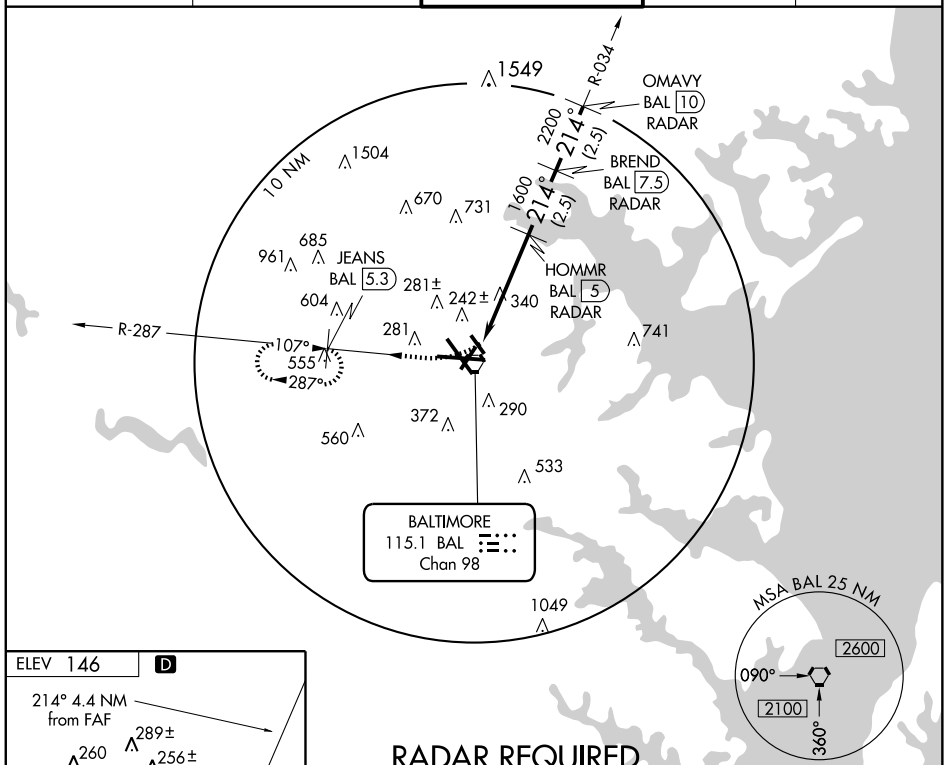
VORTAC BAL 115.1 Chan 98	APP CRS 214°	Rwy ldg 6000 TDZE 143 Apt Elev 146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

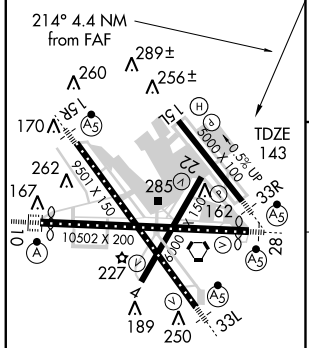
VOR/DME RWY 22

MISSED APPROACH: Climbing right turn to 2000 via BAL R-287 to JEANS/BAL 5.3 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

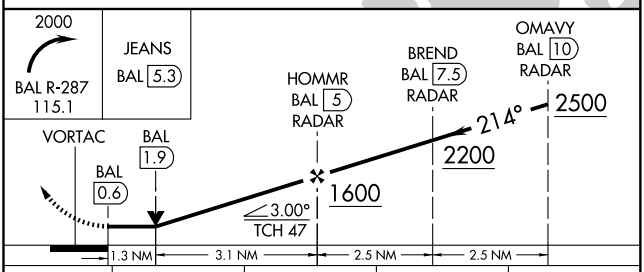


RADAR REQUIRED



TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-22	600-1 457 (500-1)		600-1¼ 457 (500-1¼)	600-1½ 457 (500-1½)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

VORTAC BAL 115.1 Chan 98	APP CRS 349°	Rwy ldg 9501 TDZE 143 Apt Elev 146

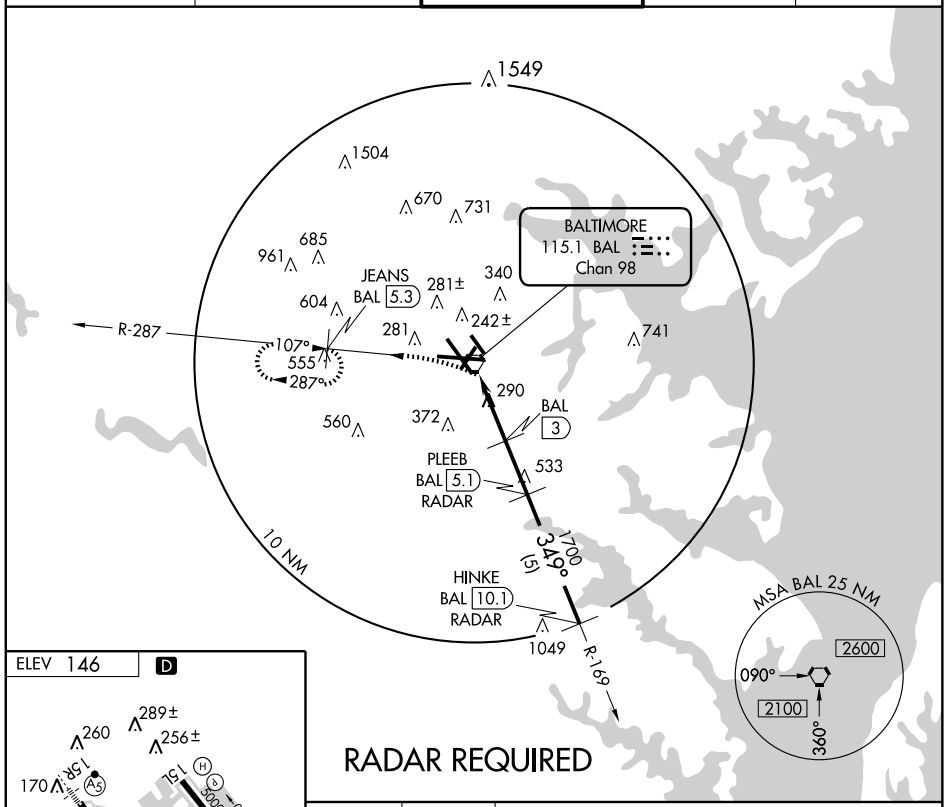
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI) VOR/DME RWY 33L

For inoperative MALSR, increase S-33L Cat D visibility to RVR 6000.

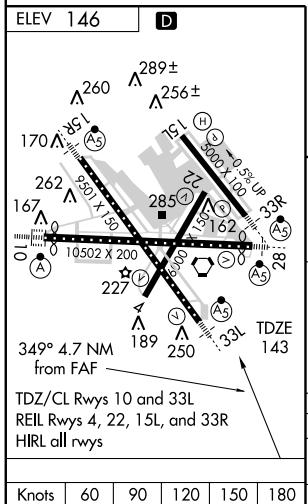
MALSR

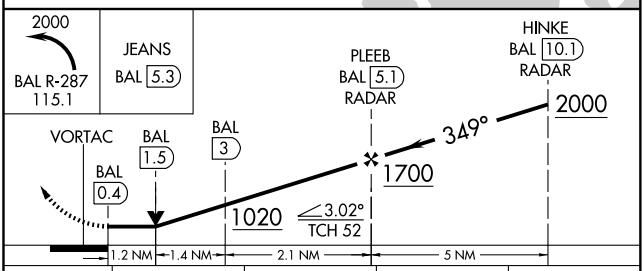
MISSED APPROACH: Climbing left turn to 2000 via BAL R-287 to JEANS/BAL 5.3 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05



RADAR REQUIRED





Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
S-33L	560/24 417 (500-½)		560/40 417 (500-¾)	560/50 417 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

VORTAC BAL 115.1 Chan 98	APP CRS 107°	Rwy ldg 9952 TDZE 144 Apt Elev 146

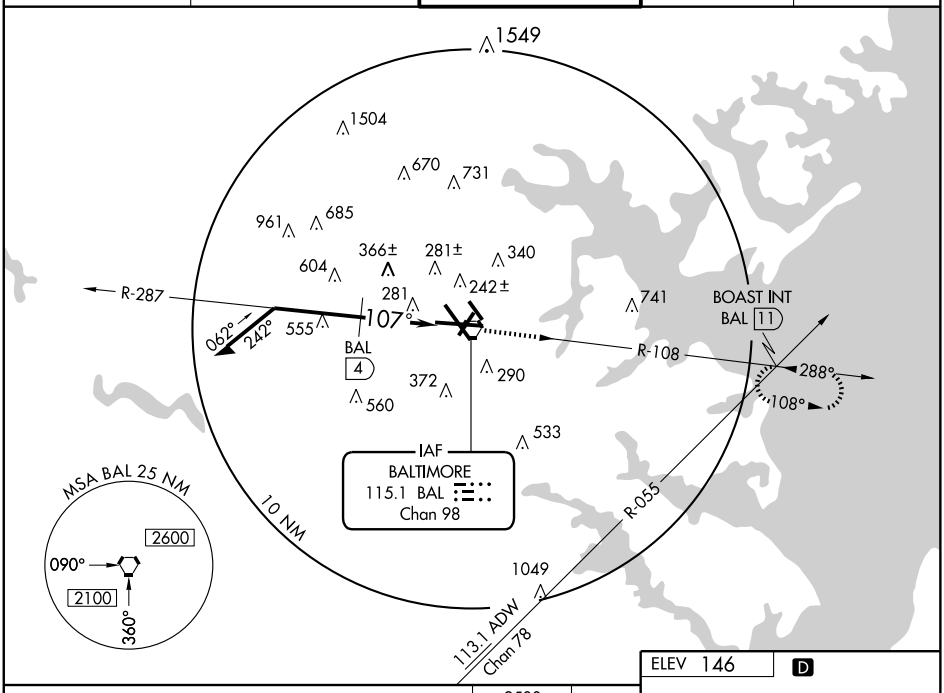
VOR RWY 10

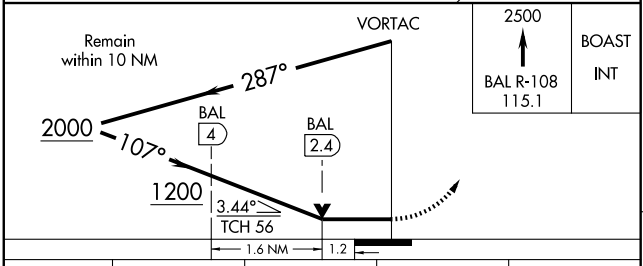
BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

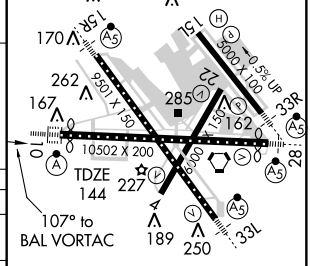
ALSF-2

MISSED APPROACH: Climb to 2500 via BAL R-108 to BOAST Int and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05







CATEGORY	A	B	C	D
S-10	1200/40 1056 (1100-¾)	1200/50 1056 (1100-1)	1200-2½ 1056 (1100-2½)	
CIRCLING	1200-1¼ 1054 (1100-1¼)	1200-1½ 1054 (1100-1½)	1200-3 1054 (1100-3)	
DME MINIMUMS				
S-10	620/24 476 (500-½)		620/40 476 (500-¾)	620/50 476 (500-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

Knots	60	90	120	150	180
Min:Sec					

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC BAL 115.1 Chan 98	APP CRS 279°	Rwy Idg 10002 TDZE 143 Apt Elev 146

BALTIMORE/ WASHINGTON INTL THURGOOD MARSHALL (BWI)

VOR RWY 28

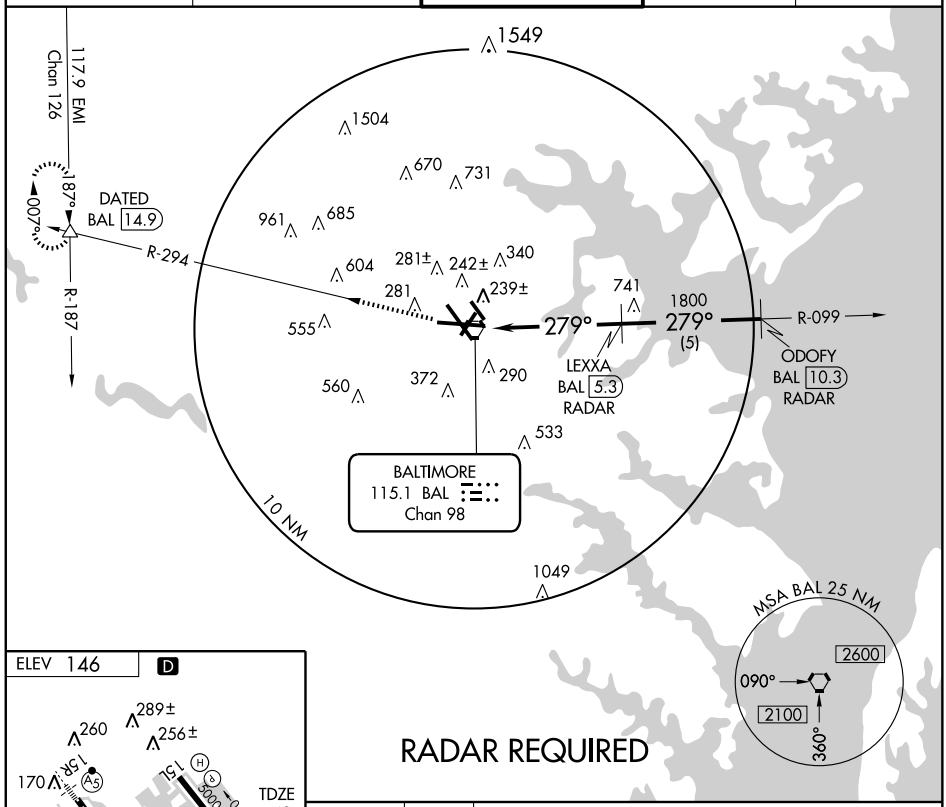
For inoperative MALSR increase S-28 Cat D visibility to RVR 6000.

NA

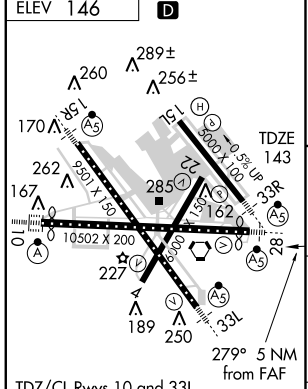
MALSR

MISSED APPROACH: Climb to 2500 via BAL R-294 to DATED Int/BAL 14.90 DME and hold.

ATIS	POTOMAC APP CON	BALTIMORE TOWER	GND CON	CLNC DEL
115.1 127.8	119.7 290.475	119.4 257.8	121.9	118.05

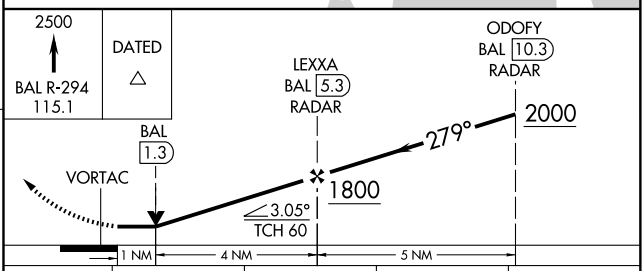


RADAR REQUIRED



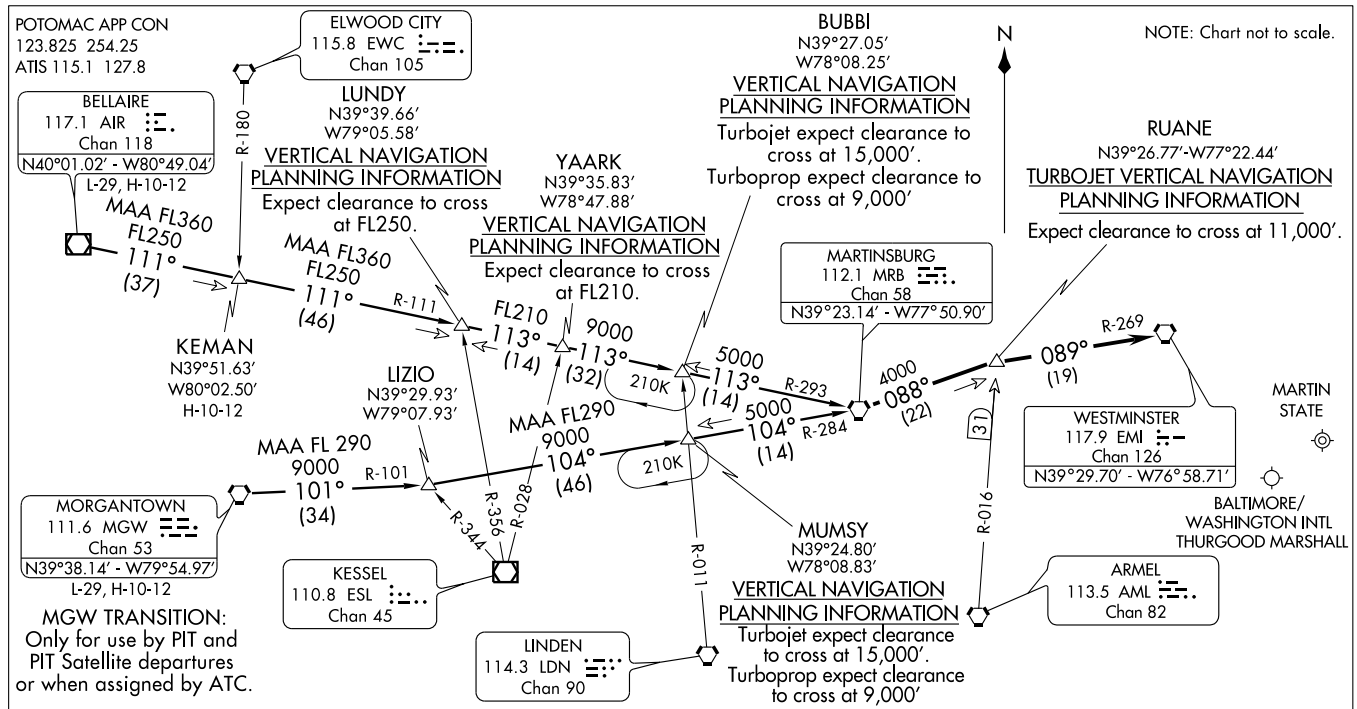
TDZ/CL Rwys 10 and 33L
REIL Rwys 4, 22, 15L, and 33R
HIRL all rwys

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-28	500/24 357 (400-½)			500/50 357 (400-1)
CIRCLING	640-1 494 (500-1)		640-1½ 494 (500-1½)	740-2 594 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.EMI5): From over AIR VOR/DME via AIR R-111 to LUNDY INT, then via MRB VORTAC R-293 to MRB. Thence . . .
KEMAN TRANSITION (KEMAN.EMI5): From over KEMAN INT via AIR R-111 to LUNDY INT, then via MRB VORTAC R-293 to MRB. Thence . . .
MORGANTOWN TRANSITION (MGW.EMI5): From over MGW VORTAC via the MGW R-101 to LIZIO INT, then via MRB VORTAC R-284 to MRB. Thence . . .

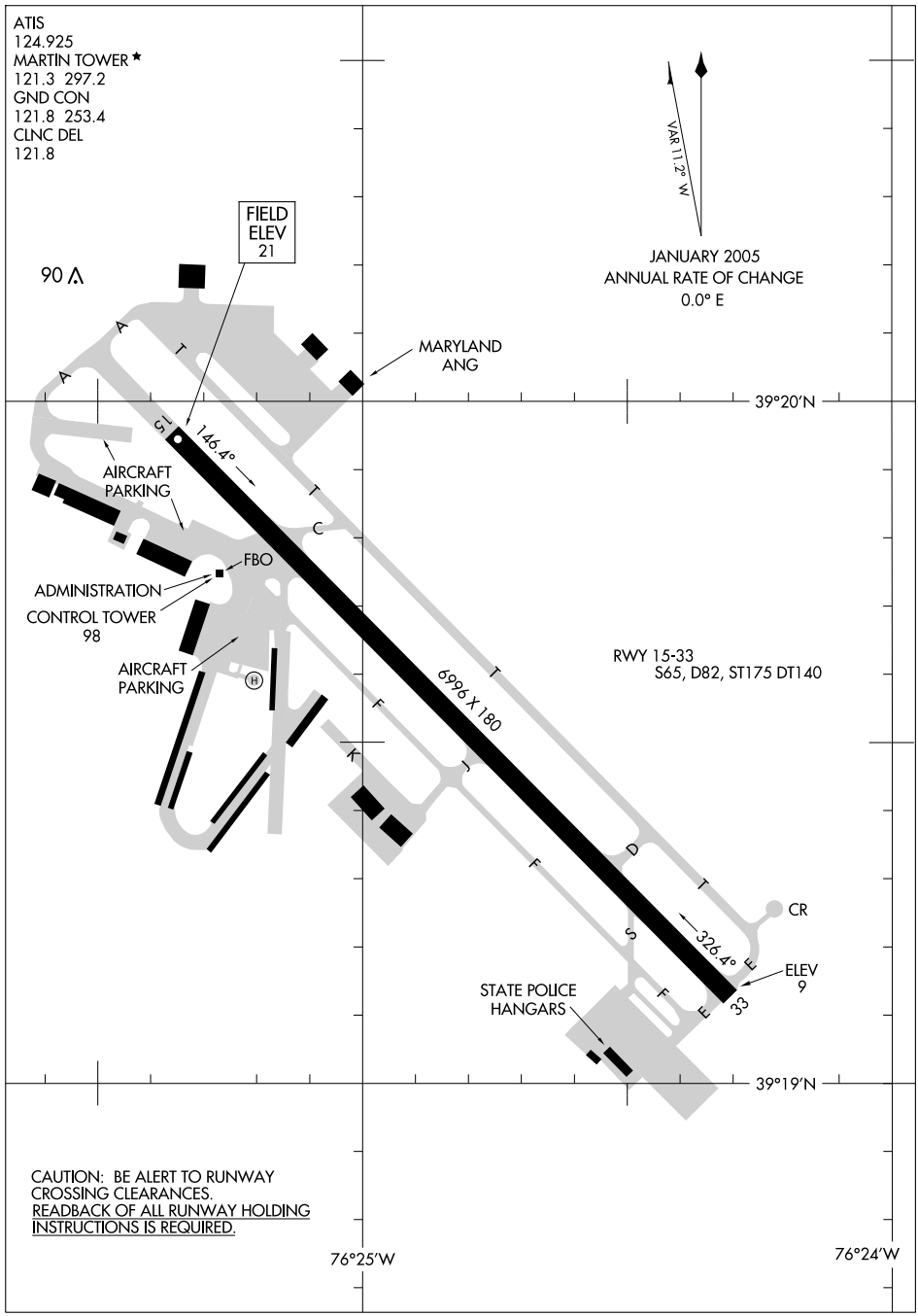
. . . From MRB via MRB R-088 to RUANE INT, then via EMI VORTAC R-269 to EMI. Expect vectors to final approach course after EMI.

09295

AIRPORT DIAGRAM

AL-5222 (FAA)

BALTIMORE/MARTIN STATE (MTN)
BALTIMORE, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

LOC/DME I-MTN	APP CRS	Rwy Idg	6996
110.7	326°	TDZE	15
Chan 44		Apt Elev	22

ILS or LOC RWY 33

BALTIMORE / MARTIN STATE (MTN)

▼ If local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all DAs/MDAs 60 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 600 then climbing left turn 2000 via heading 146° and BAL VORTAC R-104 to SWANN INT/BAL 20.2 DME and hold.

ATIS	POTOMAC APP CON	MARTIN TOWER ★	GND CON	CLNC DEL	UNICOM
124.925	119.0 282.275	121.3 (CTAF) Ⓛ 297.2	121.8 253.4	121.8	122.95

DME AND RADAR REQUIRED

LOCALIZER 110.7 I-MTN Chan 44

BALTIMORE 115.1 BAL Chan 98

CINDI INT I-MTN 6.2

(IF) JUGMO I-MTN 11.2

(SUTBE)

(IAF) SWANN INT BAL 20.2

R-4001A R-4001B R-085 R-104 R-233 R-271

114.0 DQO Chan 87

111.4 ENO Chan 51

326° 5.1 NM

2000 016° (1.6) and LOC (0.8)

284° 104° 146°

10 NM

MSA BAL 25 NM: 2600 (090°–360°), 2100

WASHINGTON DC METROPOLITAN SFRA

WARNING -- WASHINGTON DC SFRA. CONTACT POTOMAC APP CON

Procedure NA for arrivals at SWANN via V170-V214-V433 SW Bnd.

Note: Clearance through R-4001 A/B must be obtained before using this approach.

ELEV 22

TWR 98

6996 X 180

15 33

326° 6 NM from FAF

TDZE 15

HIRL Rwy 15-33 Ⓛ

REIL Rwys 15 and 33 Ⓛ

Rwy 33 ldg 8100′

(Military Operations Only)

Rwy 15 take-off 8100′

(Military Operations Only)

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

600 2000 SWANN BAL 20.2 HDG 146° BAL R-104 115.1

VGSI and ILS glidepath not coincident.

CINDI INT I-MTN 6.2 JUGMO I-MTN 11.2 I-MTN 0.2 2000 326° 2000 2000

GS 3.00° TCH 49

6 NM 5.1 NM

CATEGORY	A	B	C	D
S-ILS 33	290-1 275 (300-1)			
S-LOC 33	380-1 365 (400-1)			380-1¼ 365 (400-1¼)
CIRCLING	520-1 498 (500-1)		520-1½ 498 (500-1½)	680-2 658 (700-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

LOC I-BQG	APP CRS	Rwy Idg	6996
110.7	144°	TDZE	22
Chan 44		Apt Elev	22

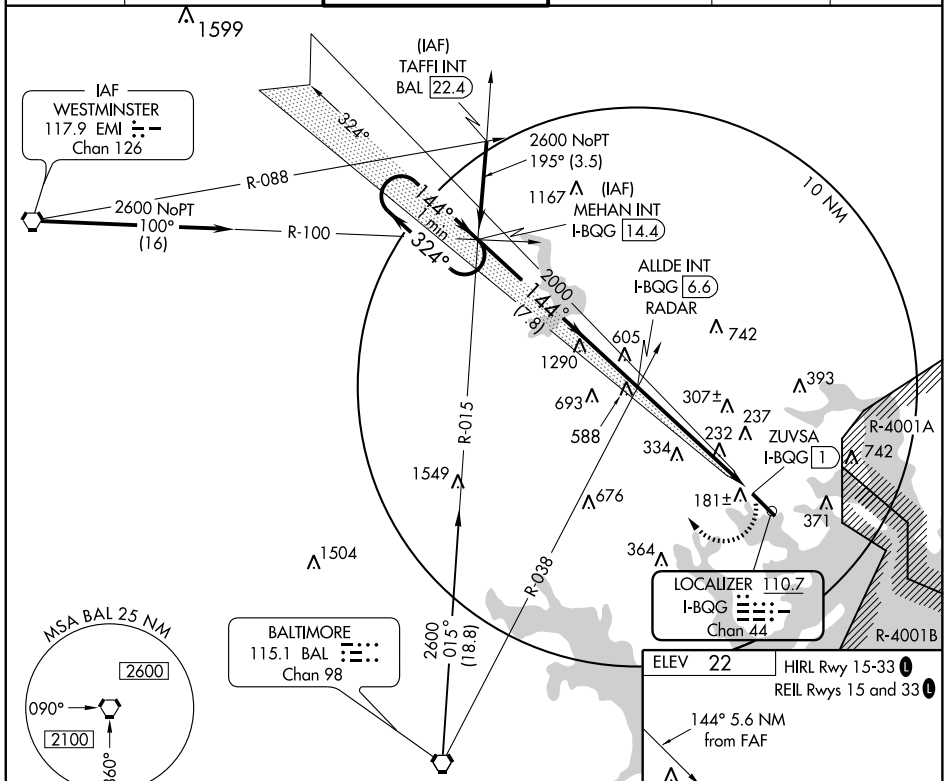
LOC RWY 15

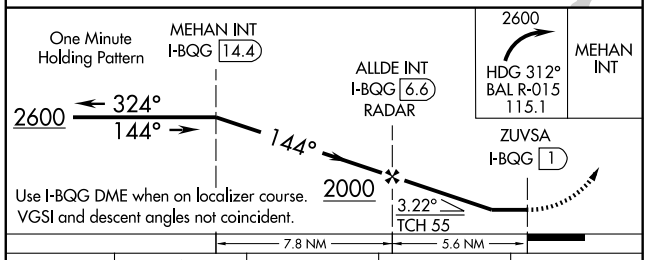
BALTIMORE / MARTIN STATE (MTN)

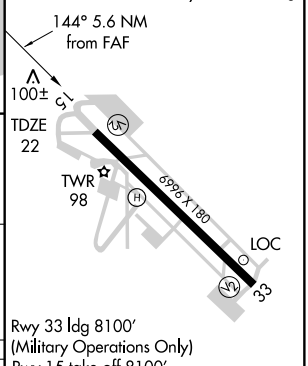
If local altimeter setting not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing right turn to 2600 via heading 312° and BAL R-015 to MEHAN Int/I-BQG 14.4 DME and hold.

ATIS	POTOMAC APP CON	MARTIN TOWER ★	GND CON	CLNC DEL	UNICOM
124.925	119.0 282.275	121.3 (CTAF) L 297.2	121.8 253.4	121.8	122.95







CATEGORY	A	B	C	D
S-15	480-1	458 (500-1)	480-1¼ 458 (500-1¼)	480-1½ 458 (500-1½)
CIRCLING	520-1	498 (500-1)	520-1½ 498 (500-1½)	680-2 658 (700-2)

FAF to MAP 5.6 NM

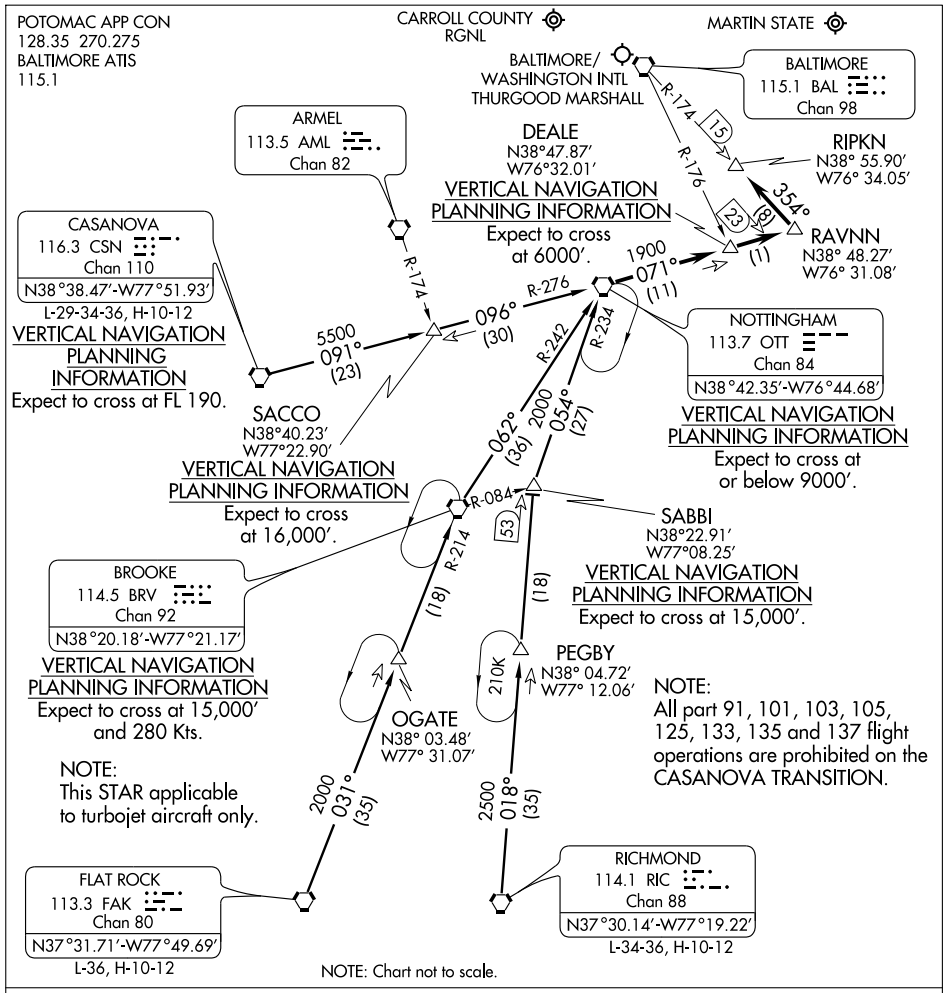
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NE-3, 17 DEC 2009 to 14 JAN 2010

(OTT.OTT6) 08101 ST-804 (FAA)

NOTTINGHAM SIX ARRIVAL

BALTIMORE, MARYLAND



ARRIVAL ROUTE DESCRIPTION

CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence . . . .

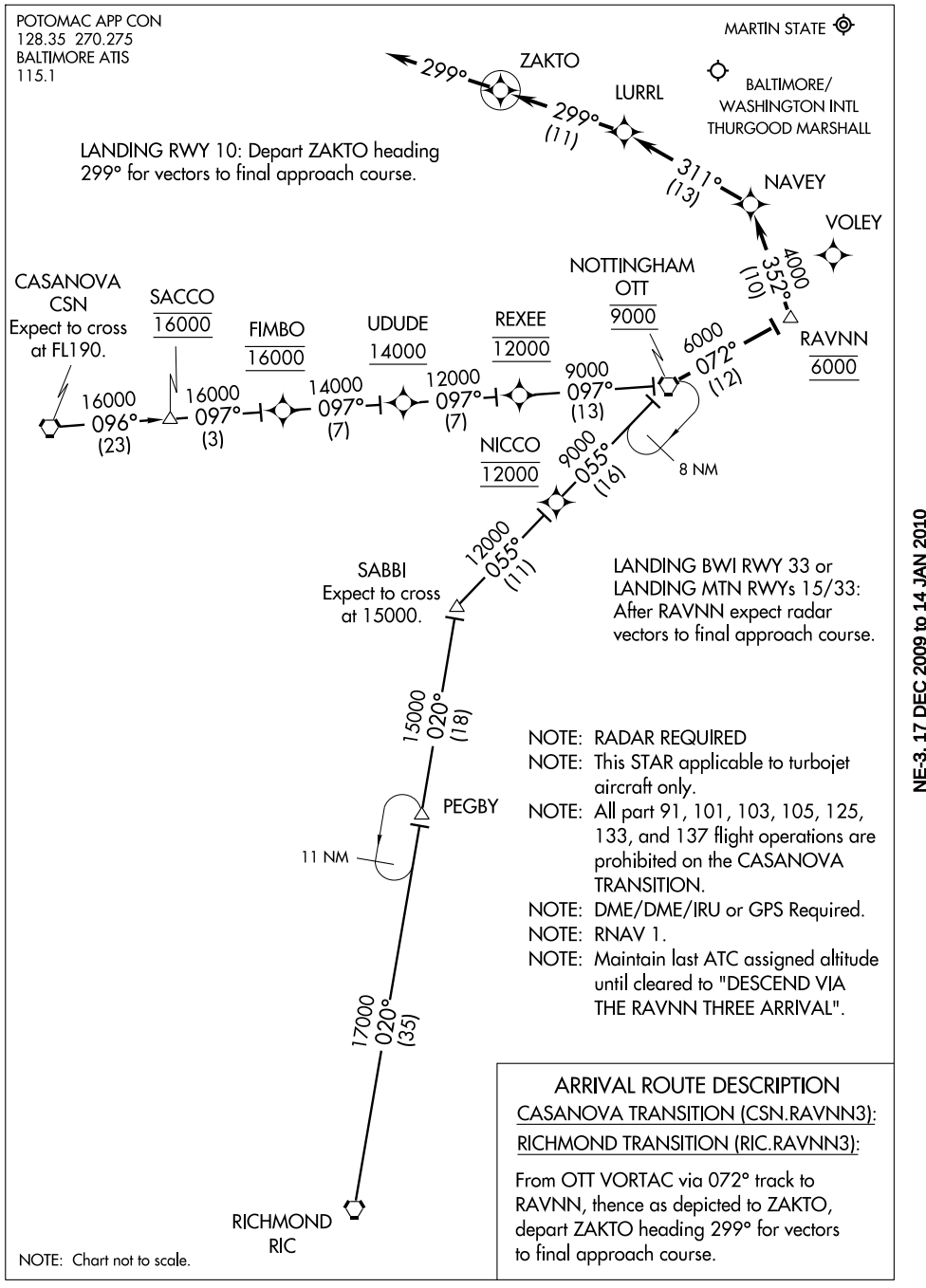
FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence . . . .

RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence . . . . . From over OTT VORTAC via OTT R-071 to RAVNN INT, then via BAL R-174 to RIPKN INT. Expect radar vectors to final approach course after passing RIPKN INT.

NE-3, 17 DEC 2009 to 14 JAN 2010

RAVNN THREE ARRIVAL (RNAV)

BALTIMORE, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	6996
146°	TDZE	22
	Apt Elev	22

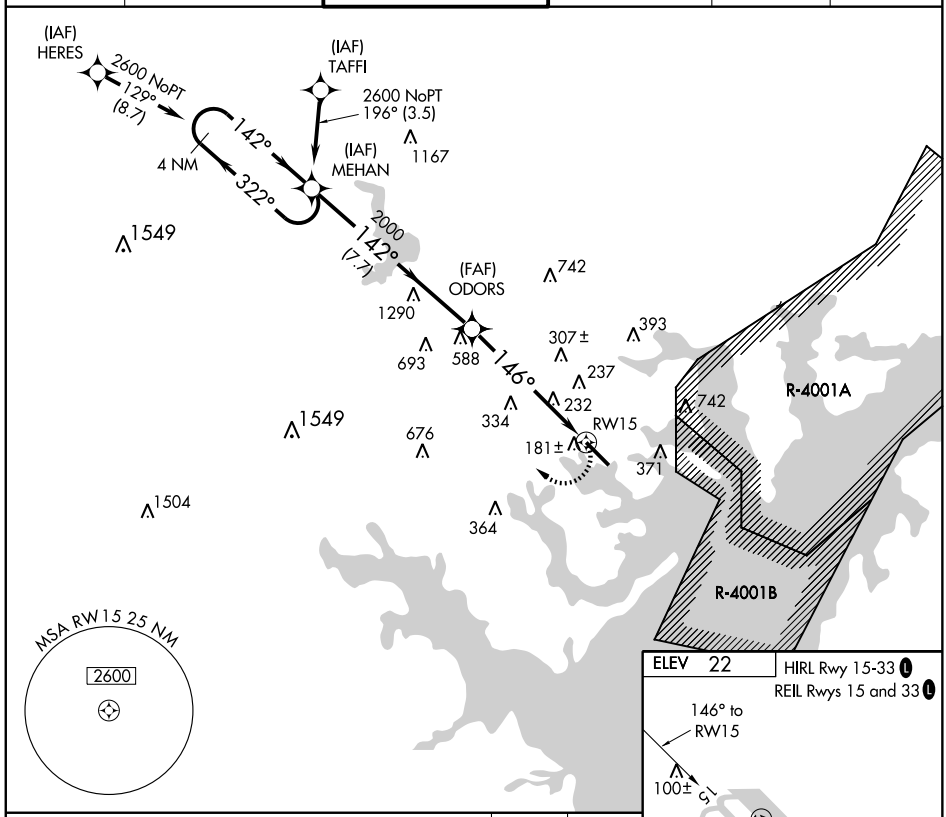
RNAV (GPS) RWY 15

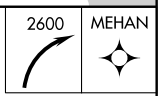
BALTIMORE / MARTIN STATE (MTN)

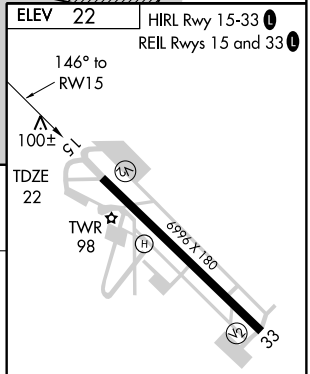
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2600 direct MEHAN WP and hold.

ATIS	POTOMAC APP CON	MARTIN TOWER ★	GND CON	CLNC DEL	UNICOM
124.925	119.0 282.275	121.3 (CTAF) L 297.2	121.8 253.4	121.8	122.95







CATEGORY	A	B	C	D
LNAV MDA	540-1	518 (600-1)	540-1½ 518 (600-1½)	540-1¾ 518 (600-1¾)
CIRCLING	540-1	518 (600-1)	540-1½ 518 (600-1½)	680-2 658 (700-2)

Rwy 33 ldg 8100′
(Military Operations Only)
Rwy 15 take-off 8100′
(Military Operations Only)

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	6996
326°	TDZE	15
	Apt Elev	22

RNAV (GPS) RWY 33

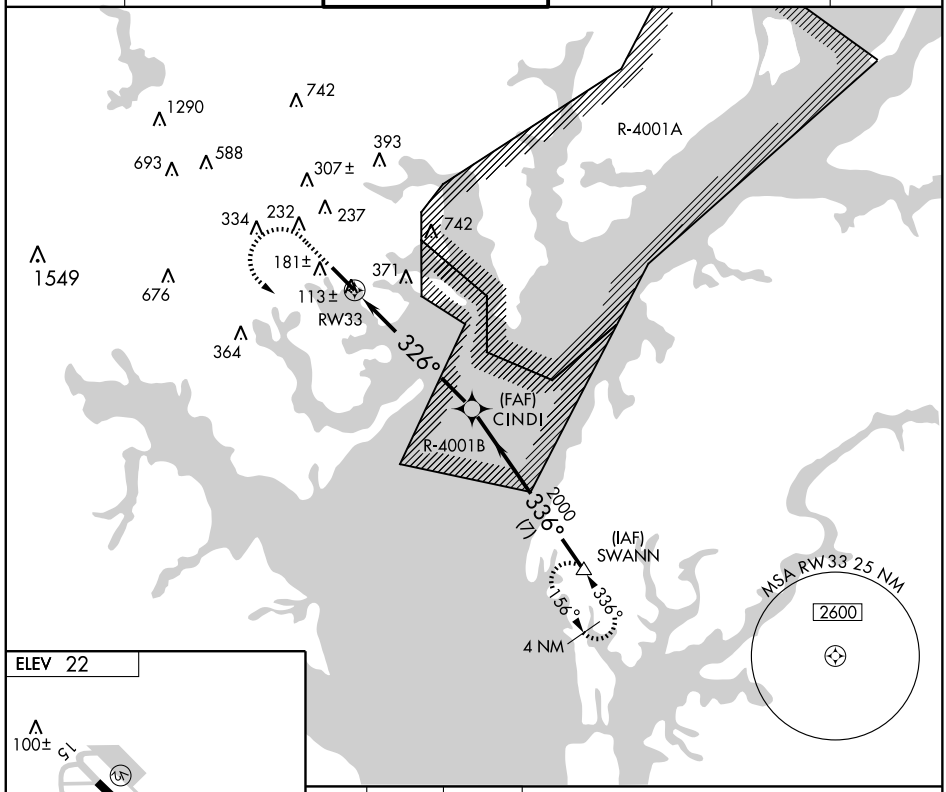
BALTIMORE / MARTIN STATE (MTN)

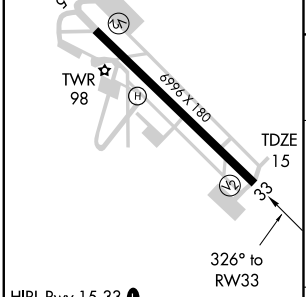
NA

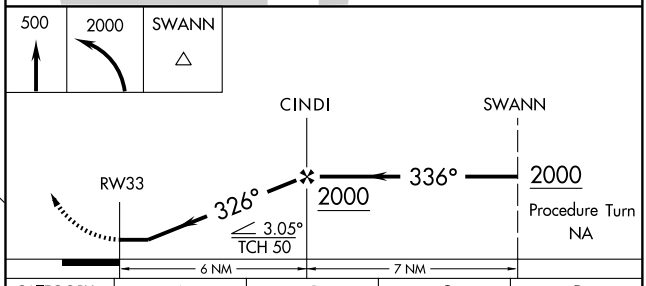
Clearance through R-4001 A/B must be obtained before using this approach.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 500 then climbing left turn to 2000 direct SWANN WP and hold.

ATIS	POTOMAC APP CON	MARTIN TOWER ★	GND CON	CLNC DEL	UNICOM
124.925	119.0 282.275	121.3 (CTAF) L 297.2	121.8 253.4	121.8	122.95







HIRL Rwy 15-33 L
REIL Rwys 15 and 33 L
Rwy 33 ldg 8100'
(Military Operations Only)
Rwy 15 take-off 8100'
(Military Operations Only)

CATEGORY	A	B	C	D
LNAV MDA	380-1 365 (400-1)			380-1¼ 365 (400-1¼)
CIRCLING	520-1 498 (500-1)		520-1½ 498 (500-1½)	680-2 658 (700-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

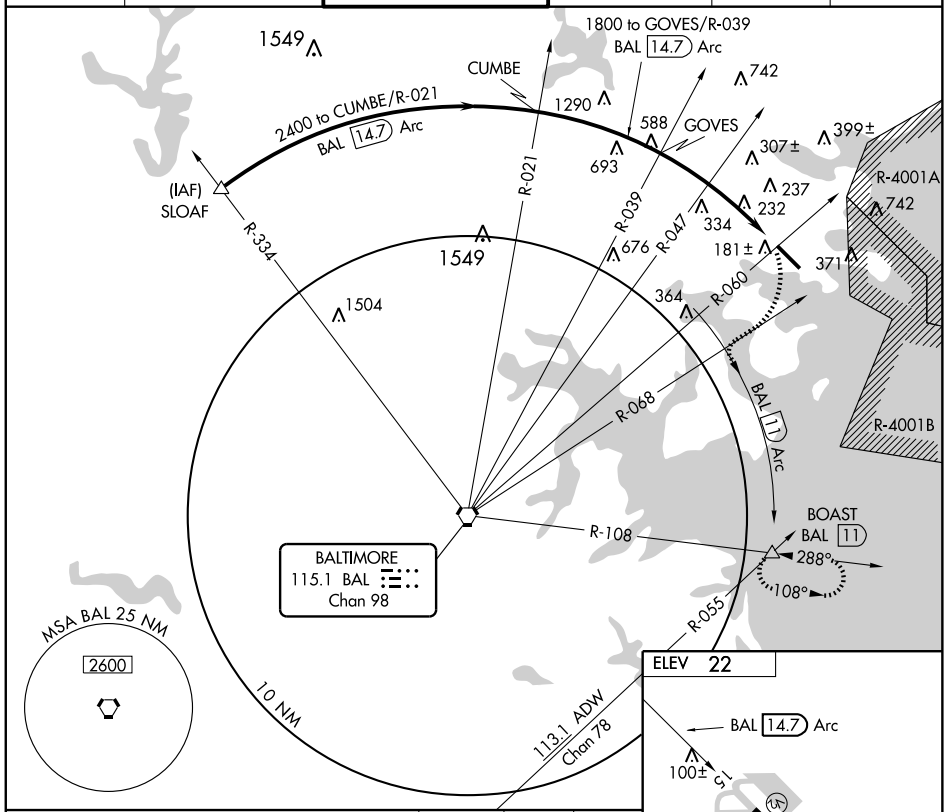
VORTAC BAL	BAL	Rwy Idg	6996
115.1	14.7	TDZE	22
Chan 98	Arc	Apt Elev	22

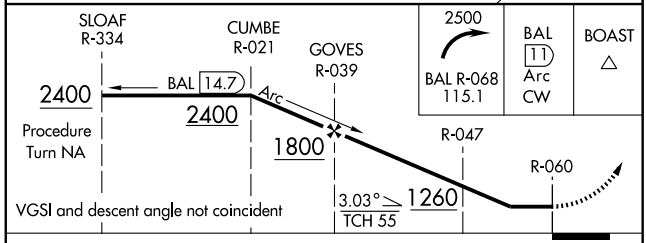
VOR/DME or TACAN Z RWY 15

BALTIMORE / MARTIN STATE (MTN)

MISSED APPROACH: Climbing right turn to 2500 via BAL R-068 and BAL 11 DME Arc clockwise to BOAST Int/BAL 11 DME and hold.

ATIS	POTOMAC APP CON	MARTIN TOWER ★	GND CON	CLNC DEL	UNICOM
124.925	119.0 282.275	121.3 (CTAF) L 297.2	121.8 253.4	121.8	122.95



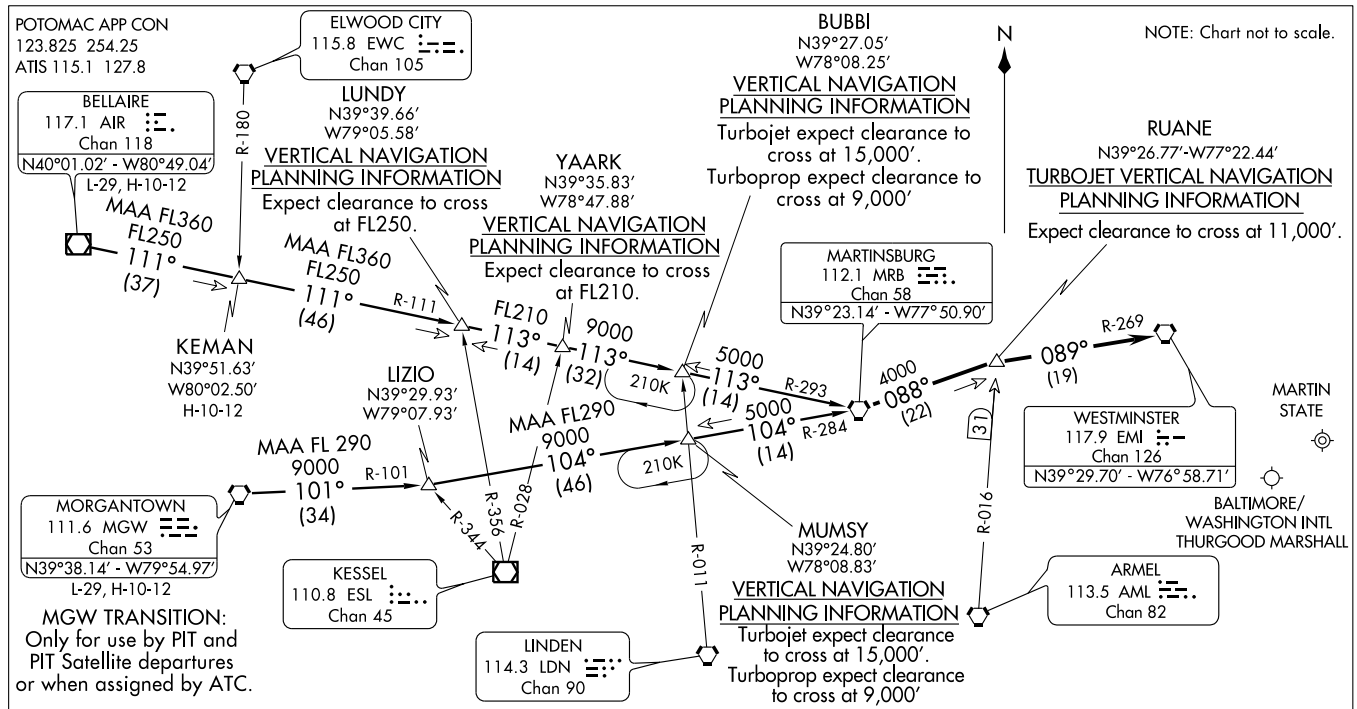


CATEGORY	A	B	C	D
S-15	900-1 878 (900-1)	900-1¼ 878 (900-1¼)	900-2½ 878 (900-2½)	900-2¾ 878 (900-2¾)
CIRCLING	900-1 878 (900-1)	900-1¼ 878 (900-1¼)	900-2½ 878 (900-2½)	900-2¾ 878 (900-2¾)

Rwy 33 ldg 8100'
(Military Operations Only)
Rwy 15 take-off 8100'
(Military Operations Only)

HIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

NE-3. 17 DEC 2009 to 14 JAN 2010



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.EMI5): From over AIR VOR/DME via AIR R-111 to LUNDY INT, then via MRB VORTAC R-293 to MRB. Thence . . .
KEMAN TRANSITION (KEMAN.EMI5): From over KEMAN INT via AIR R-111 to LUNDY INT, then via MRB VORTAC R-293 to MRB. Thence . . .
MORGANTOWN TRANSITION (MGW.EMI5): From over MGW VORTAC via the MGW R-101 to LIZIO INT, then via MRB VORTAC R-284 to MRB. Thence . . .

. . . From MRB via MRB R-088 to RUANE INT, then via EMI VORTAC R-269 to EMI. Expect vectors to final approach course after EMI.

NDB CGE	APP CRS	Rwy Idg	4477
355	335°	TDZE	20
		Apt Elev	20

NDB or GPS RWY 34

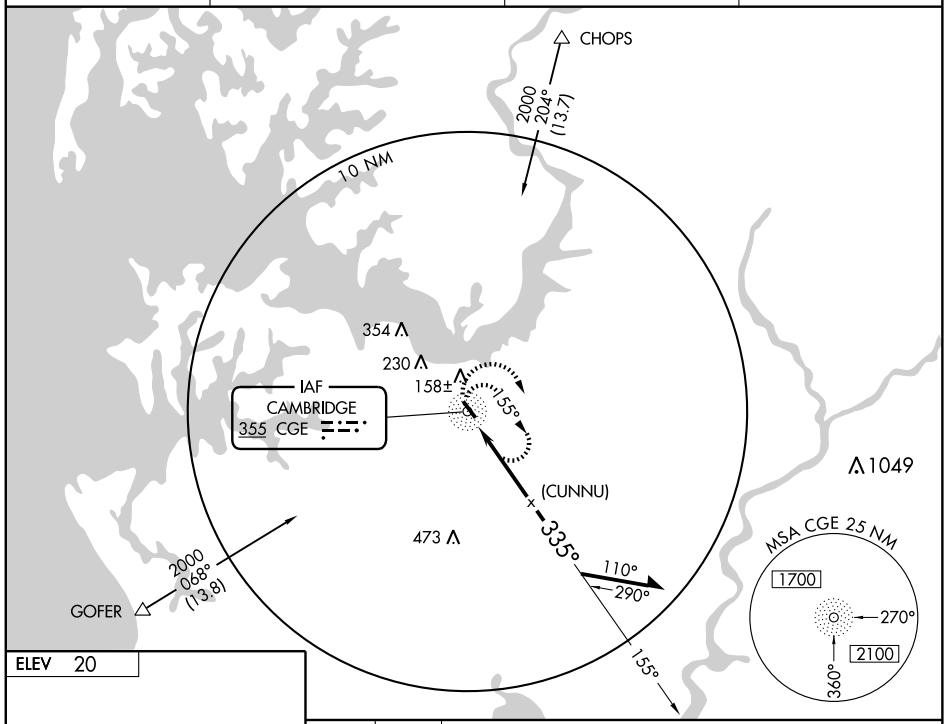
CAMBRIDGE-DORCHESTER (CGE)

▼ When Cambridge altimeter not received, use Salisbury altimeter.

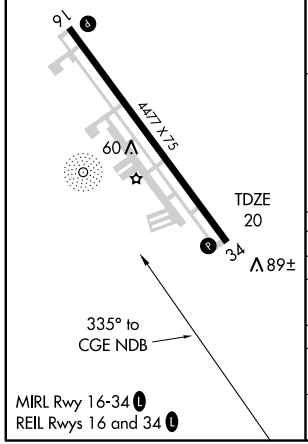
▲ NA

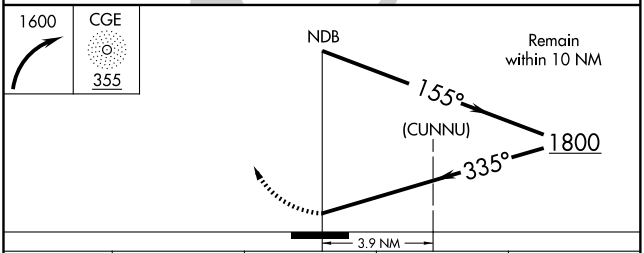
MISSED APPROACH: Climbing right turn to 1600 in CGE NDB holding pattern.

ASOS	PATUXENT APP CON ★	UNICOM	121.9 Ⓛ
120.675	121.0 250.3	122.7 (CTAF)	



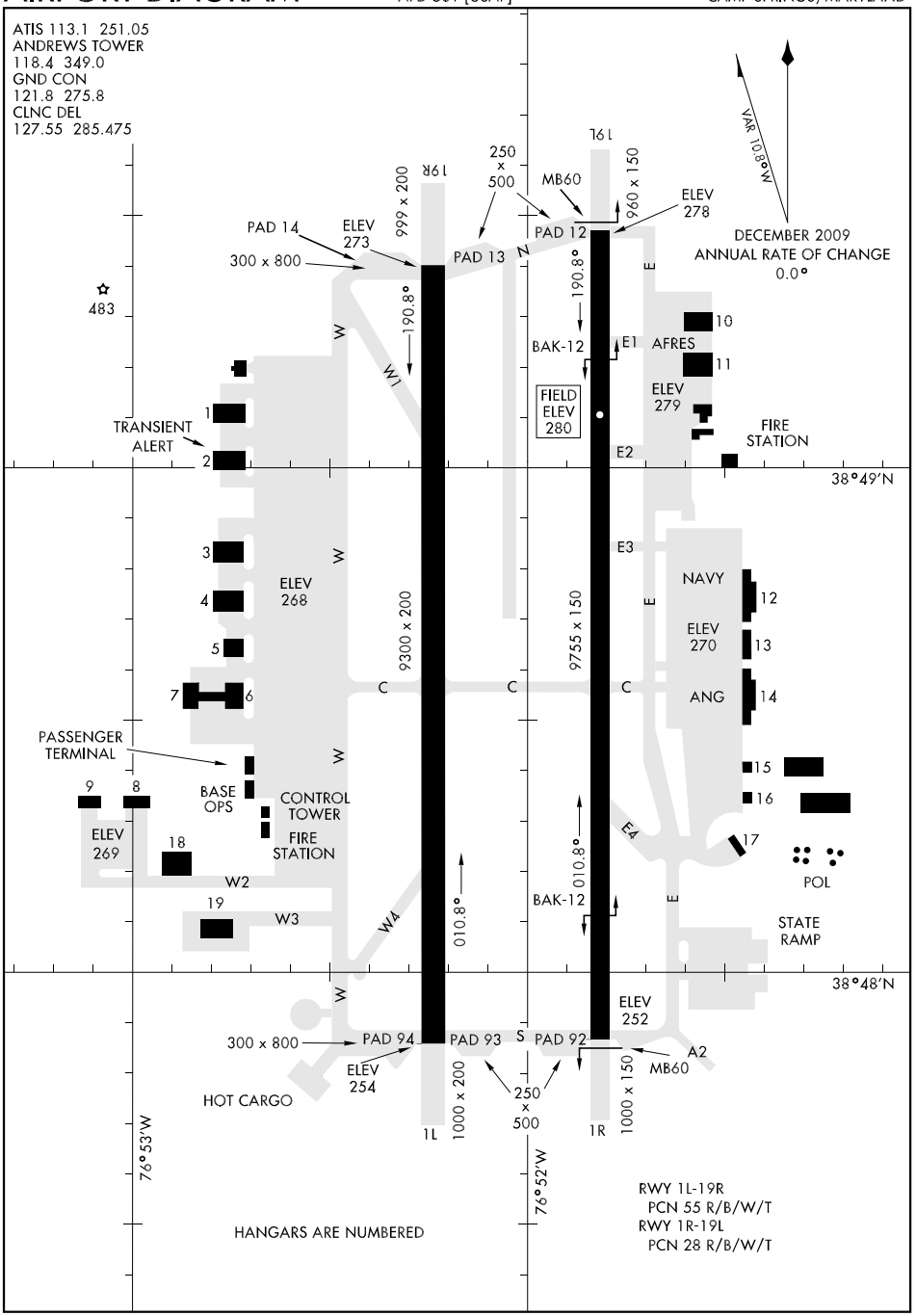
ELEV 20





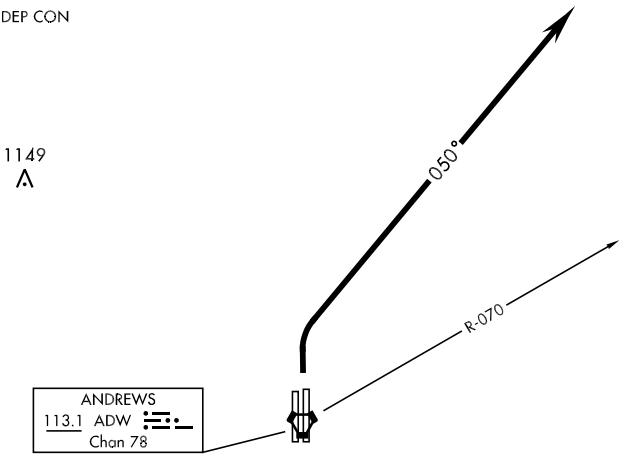
CATEGORY	A	B	C	D
S-34	440-1	420 (500-1)	440-1¼	420 (500-1¼)
CIRCLING	460-1 440 (500-1)	480-1 460 (500-1)	480-1½ 460 (500-1½)	580-2 560 (600-2)
SALISBURY ALTIMETER MINIMUMS				
S-34	560-1	540 (600-1)	560-1½ 540 (600-1½)	560-1¾ 540 (600-1¾)
CIRCLING	580-1	560 (600-1)	580-1½ 560 (600-1½)	680-2 660 (700-2)

NE-3. 17 DEC 2009 to 14 JAN 2010



NE-3, 17 DEC 2009 to 14 JAN 2010

ATIS 113.1 251.05
GND CON
121.8 275.8
ANDREWS TOWER
118.4 349.0
POTOMAC TRACON DEP CON
125.65 348.725



RADAR VECTORS REQUIRED
WITHIN 10 NM
FROM DEPARTURE

RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Turn right climb on track 050° to 3000. Expect radar vectors to intercept ADW R-070.

NE-3, 17 DEC 2009 to 14 JAN 2010

CAMP SPRINGS ONE DEPARTURE

SL-561 [USAF]

CAMP SPRINGS, MARYLAND

ATIS 113.1 251.05
GND CON
121.8 275.8
ANDREWS TOWER
118.4 349.0
POTOMAC TRACON DEP CON
118.95 257.2

Rwy	Knots	60	120	180	240
1L/1R	V/V(fpm)	380	760	1140	1520

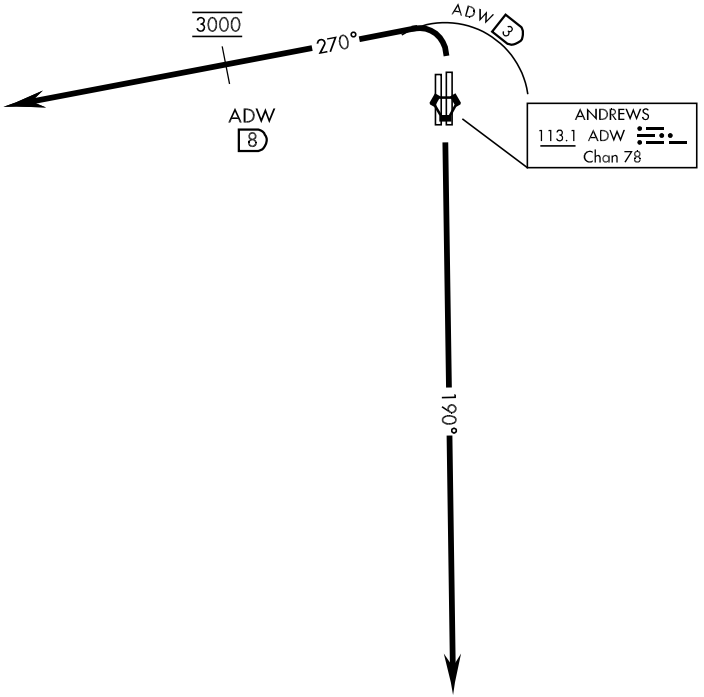
ATC Climb Rate to 3000

If unable to make published climb gradient advise ATC prior to departure.

RADAR REQUIRED

1149
A

RADAR VECTORS REQUIRED
WITHIN 10 NM
FROM DEPARTURE

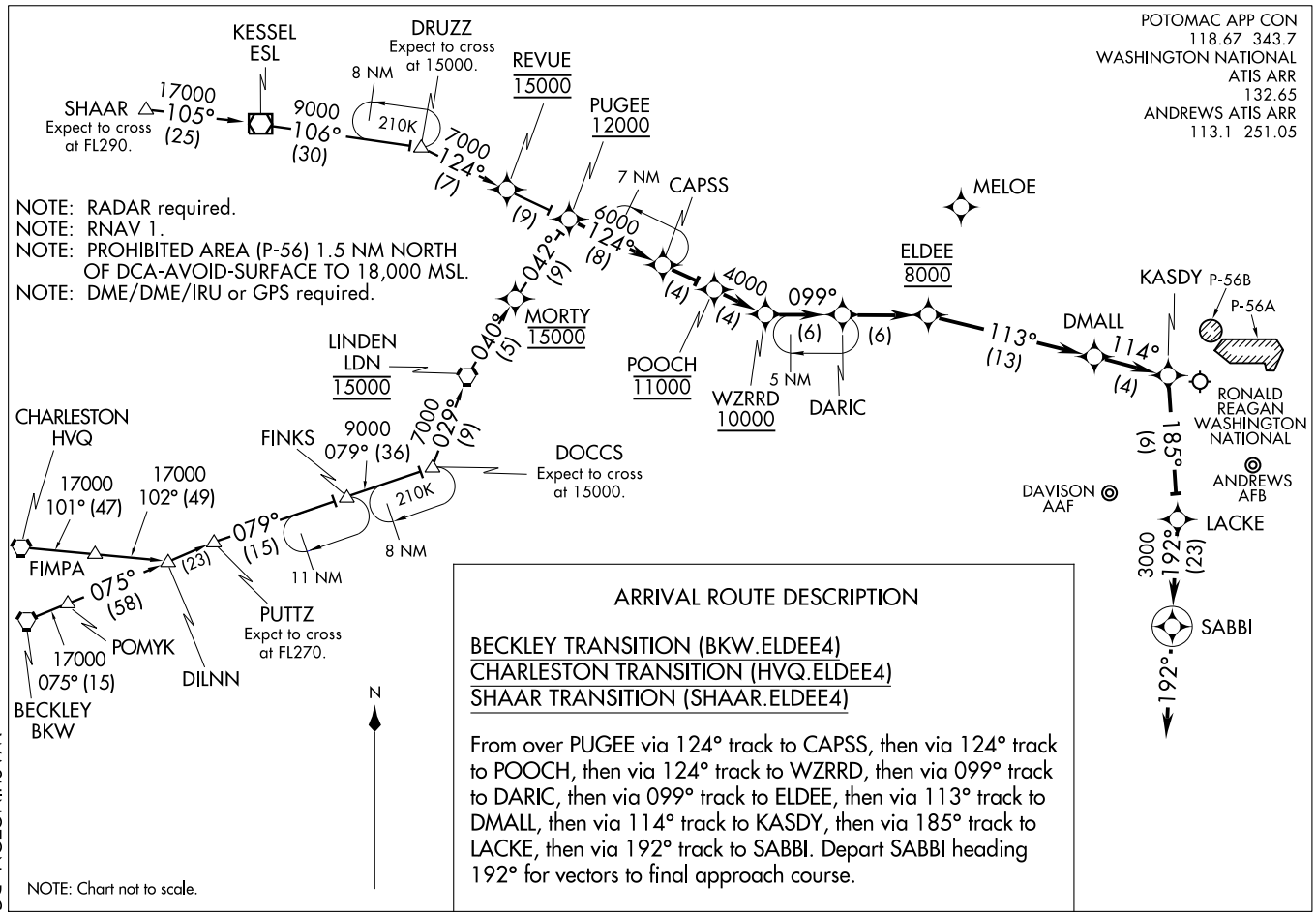


NE-3, 17 DEC 2009 to 14 JAN 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Turn left climb on track 270° within 3 DME of ADW VORTAC, cross ADW 8 DME at 3000. Expect radar vectors.

TAKE-OFF RWY 19R/19L: Climb on track 190° to 3000. Expect radar vectors to the west.



ELDEE FOUR ARRIVAL (RNAV) (ELDEE.ELDEE4) 09015

WASHINGTON, DC

ST-443 (FAA)

ILS or LOC/DME RWY 19L

LOC I-GQZ 110.5	APCH CRS 190°	Rwy ldg 9755 TDZE 280 Arpt Elev 280

AL-561 [USAF]

ANDREWS AFB (KADW)

▼ * When ALS inop, increase CAT CDE RVR to 50 and vis to 1 mile.
** When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT D RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.

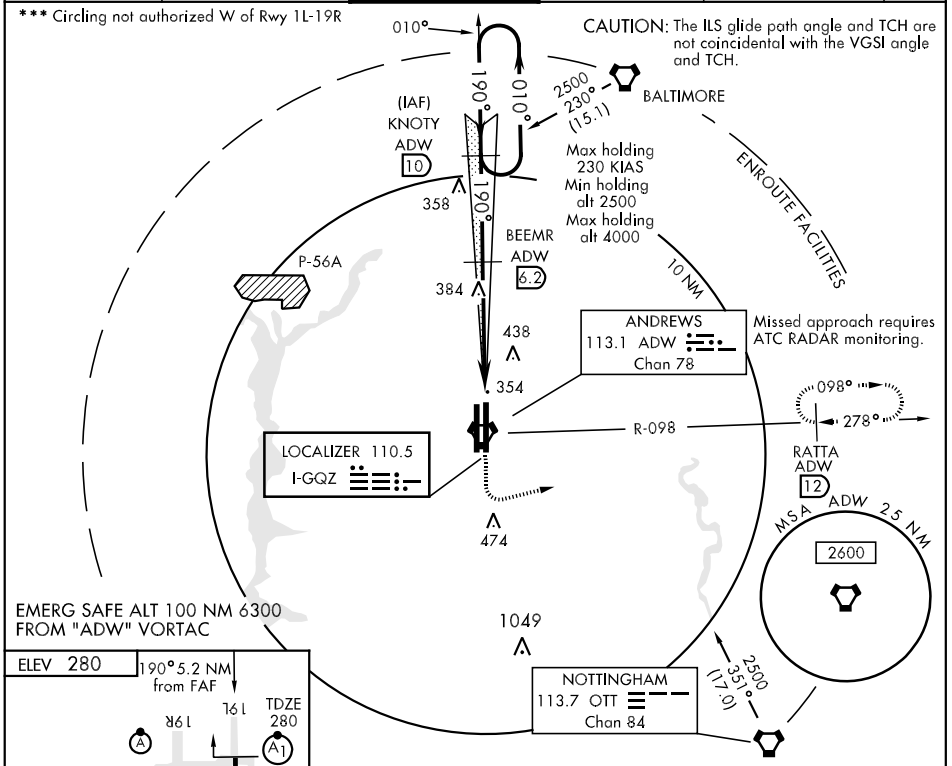
ALSF-1 (A1)

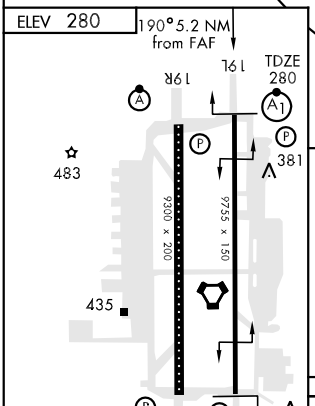
MISSED APPROACH: Climb to 900 then climbing left turn to 2500 direct RATTA and hold.

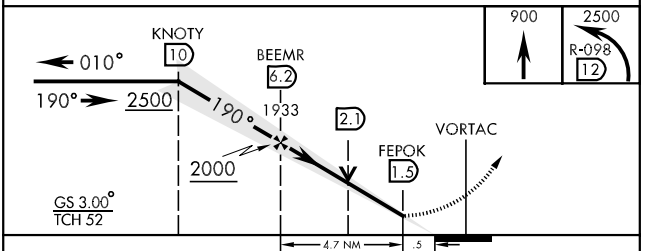
ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

*** Circling not authorized W of Rwy 1L-19R

CAUTION: The ILS glide path angle and TCH are not coincidental with the VGSI angle and TCH.







CATEGORY	A	B	C	D	E
S-ILS 19L *	564/40		284		(300-¾)
S-LOC 19L **	680/40	400		(400-¾)	680/50 400 (400-1)
CIRCLING ***	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

ILS or LOC RWY 1L

LOC I-RWS	APCH CRS	Rwy ldg / TDZE / Arpt Elev
111.5	010°	9300 / 260 / 280

AL-561 [USAF]

ANDREWS AFB (KADW)

* When ALS inop increase RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.

ALSF-2

MISSED APPROACH: Climb to 900 then climbing right turn to 2500 direct RATTA and hold. Expect further clearance from APP CON.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

*** Circling not authorized W of Rwy 1L-19R.

† When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, and CAT E vis to 2 miles.

ANDREWS 113.1 ADW Chan 78

Missed approach requires ATC RADAR monitoring.

LOCALIZER 111.5 I-RWS

R-098

098° 278°

RATTA ADW 12

IM MM

HAPUP ADW 2.7

GORME ADW 6.5 /RADAR

R-310 R-276 R-246

NOTTINGHAM 113.7 OTT Chan 84

(IAF) PREZZ ADW 10

Min holding alt 2500
Max holding alt 5000

Max holding 230 KIAS

No PT (IAF) FIGOM ADW 15

To FIGOM No PT 2500 316° (27.4)

PATUXENT

ENROUTE FACILITIES

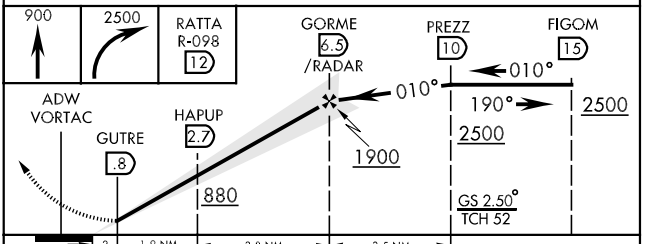
10 NM

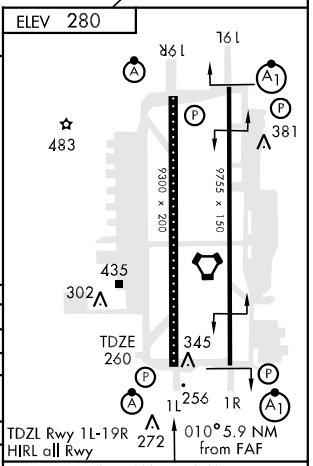
P-73

MSA ADW 25 NM 2600

438 349 474 521 460 1049 988 010° 190°

EMERG SAFE ALT 100 NM 6300 FROM "ADW" VORTAC





CATEGORY	A	B	C	D	E
S-ILS 1L *	460/18 200 (200-½)		460/24 200 (200-½)		
S-LOC 1L **	640/24 380 (400-½)		640/40 380 (400-¾)		
CIRCLING***	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)
WITHOUT LAST STEPDOWN FIX					
S-LOC 1L †	800/24 540 (600-½)		800/50 540 (600-1)	800/60 540 (600-1¼)	800/1½ 540 (600-1½)
CIRCLING***	780-1 500 (500-1)		780-1½ 500 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

ILS or LOC RWY 1R

LOC I-VJM	APCH CRS	Rwy ldg	TDZE	Arpt Elev
110.5	010°	9755	265	280

AL-561 [USAF]

ANDREWS AFB (KADW)

▼ *When ALS inop, increase RVR to 50, vis to 1 mile.
**When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles.
***Circling not authorized W of Rwy 1L-19R.

ALSF-1

MISSED APPROACH: Climb to 900 then climbing right turn to 2500 direct RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

† When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼miles CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

P-56A

LOCALIZER 110.5 I-VJM

ANDREWS 113.1 ADW Chan 78

NOTTINGHAM 113.7 OTT Chan 84

Missed Approach requires ATC RADAR monitoring

098° 278°

R-098

RATTA ADW 12

WIPAG ADW 2.7 / OTT R-311

GREEF ADW 5.2 / OTT R-289/ RADAR

BRINE ADW 10 / OTT R-245

(IAF)

474 521 1049 988

R-311 R-289 R-245

10 NM

ENROUTE FACILITIES

MSA ADW 2.5 NM 2600

Max holding 230 KIAS
Min holding alt 2500
Max holding alt 5000

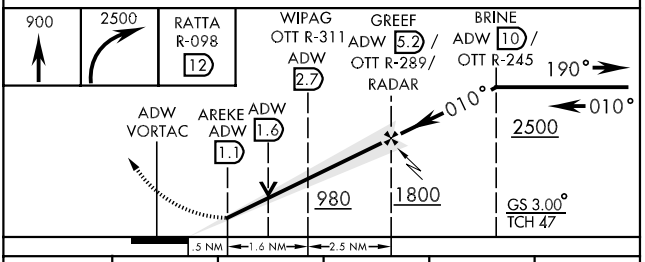
190° 010° 190°

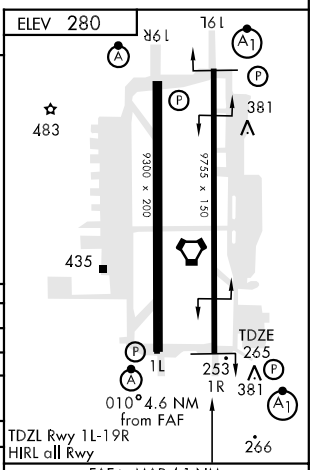
2500 324° (30.4)

PATUXENT

CAUTION: ILS TCH and VGSI TCH do not coincide.

EMERG SAFE ALT 100 NM 6300 FROM "ADW" VORTAC





CATEGORY	A	B	C	D	E
S-ILS 1R *	515/40		250	(300-¾)	
S-LOC 1R **	640/40		375	(400-¾)	
CIRCLING ***	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)
NON-DME AND SINGLE VOR MINIMA					
S-LOC 1R †	760/40 495 (500-¾)			760/50 495 (500-1)	760/60 495 (500-1¼)
CIRCLING ***	760-1 480 (500-1)		760-1½ 480 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

ILS or LOC RWY 19R

LOC I-MXK	APCH CRS	Rwy ldg	TDZE	Arpt Elev
111.5	190°	9300	273	280

AL-561 [USAF]

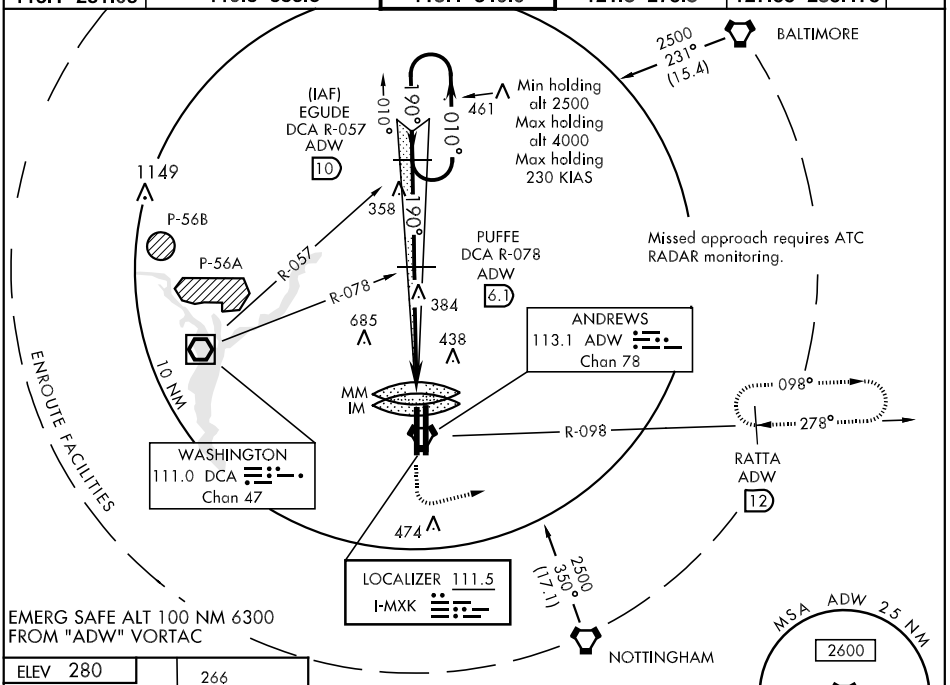
ANDREWS AFB (KADW)

* When ALS inop, increase CAT ABCDE RVR to 40 and vis to ¾ mile.
** When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles..
*** Circling not authorized W of Rwy 1L-19R.

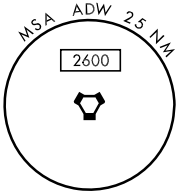
ALSF-2

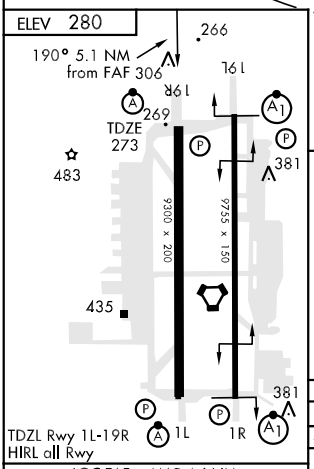
MISSED APPROACH: Climb to 900, then climbing left turn to 2500 direct RATTA and hold.

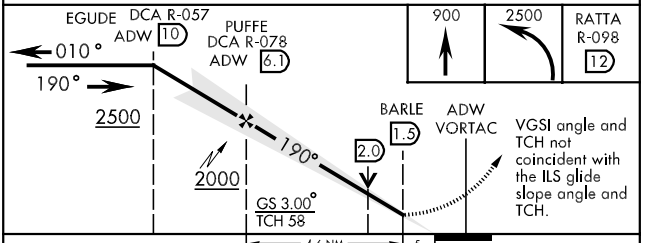
ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	



EMERG SAFE ALT 100 NM 6300
FROM "ADW" VORTAC







CATEGORY	A	B	C	D	E
S-ILS 19R *	473/18 200 (200-½)		473/24 200 (200-½)		
S-LOC 19R**	680/24 407 (400-½)		680/40 407 (400-¾)		680/50 407 (400-1)
CIRCLING ***	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460(500-1 ½)	840-2 560 (600-2)	880-2 600 (600-2)

LOC FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

ILS RWY 1L (CAT II)

LOC I-RWS	APCH CRS	Rwy Idg / TDZE / Arpt Elev	AL-561 [USAF]	ANDREWS AFB (KADW)
111.5	010°	9300 / 260 / 280		

ALSF-2

MISSED APPROACH: Climb to 900 then climbing right turn to 2500 direct RATTA and hold. Expect further clearance from APP CON.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

CATEGORY II ILS
SPECIAL AIRCREW &
AIRCRAFT CERTIFICATION
REQUIRED

LOCALIZER 111.5
I-RWS

Missed approach requires ATC RADAR monitoring.

438

098°
278°
R-098

IM
MM
344
474

ANDREWS
113.1 ADW
Chan 78

RATTA
ADW
12

P-73

GORME
ADW
6.5

460
1049
R-246

NOTTINGHAM
113.7 OTT
Chan 84

(IAF)
PREZZ
ADW 10

Min holding alt 2500
Max holding alt 5000
988

190°
010°

(IAF)
FIGOM
ADW
15
PTX R-316
No PT

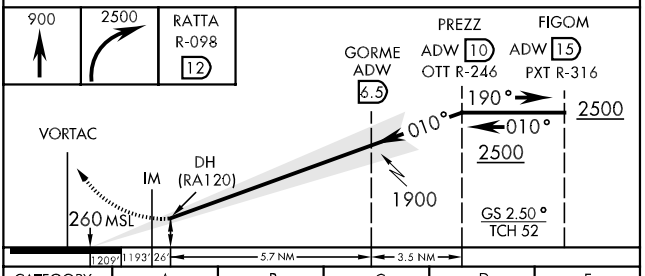
PATUXENT
117.6 PXT
Chan 123

MSA ADW 25 NM
2600

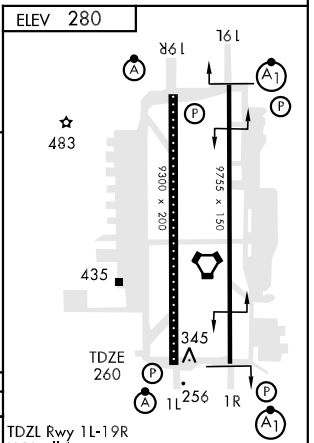
10 NM
2500
316°
(27.4)
No PT

ENROUTE FACILITIES

EMERG SAFE ALT 100 NM 6300
FROM "ADW" VORTAC



CATEGORY	A	B	C	D	E
S-ILS 1L	360/12	100	(RA120)		



ILS RWY 19R (CAT II)

LOC I-MXK	APCH CRS	Rwy ldg 9300 / TDZE 273 / Arpt Elev 280
111.5	190°	

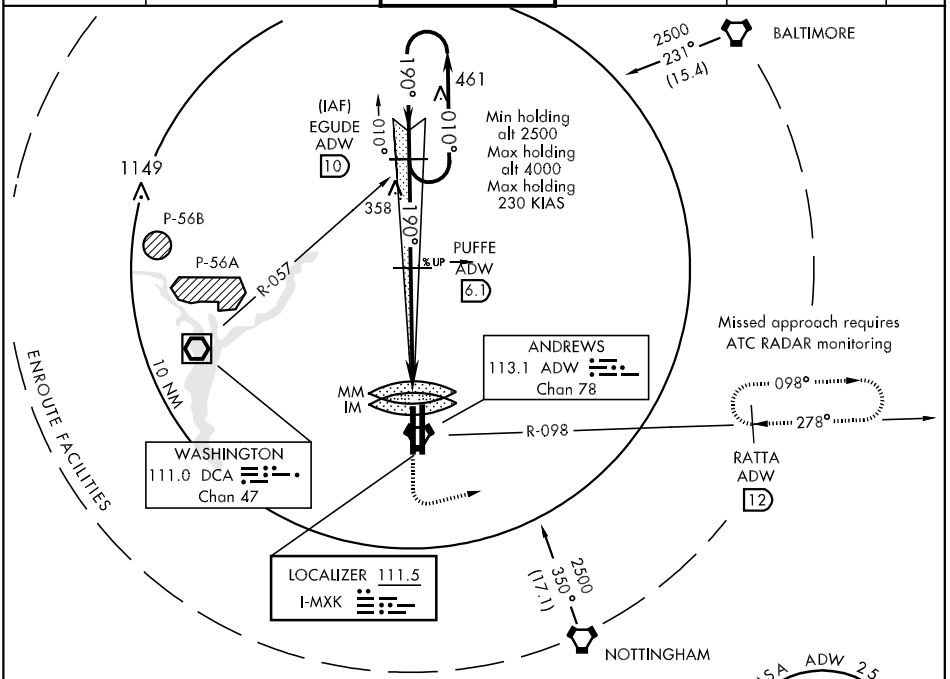
AL-561 [USAF]

ANDREWS AFB (KADW)

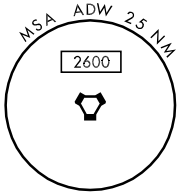
ALSF-2

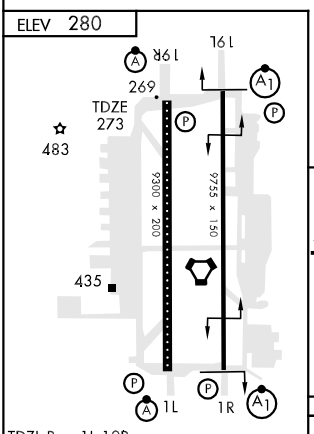
MISSED APPROACH: Climb to 900 then climbing left turn to 2500 direct RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

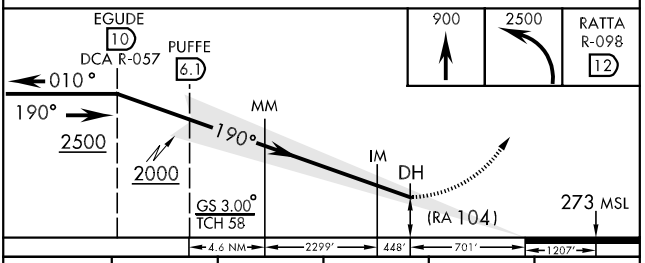


EMERG SAFE ALT 100 NM 6300
FROM "ADW" VORTAC





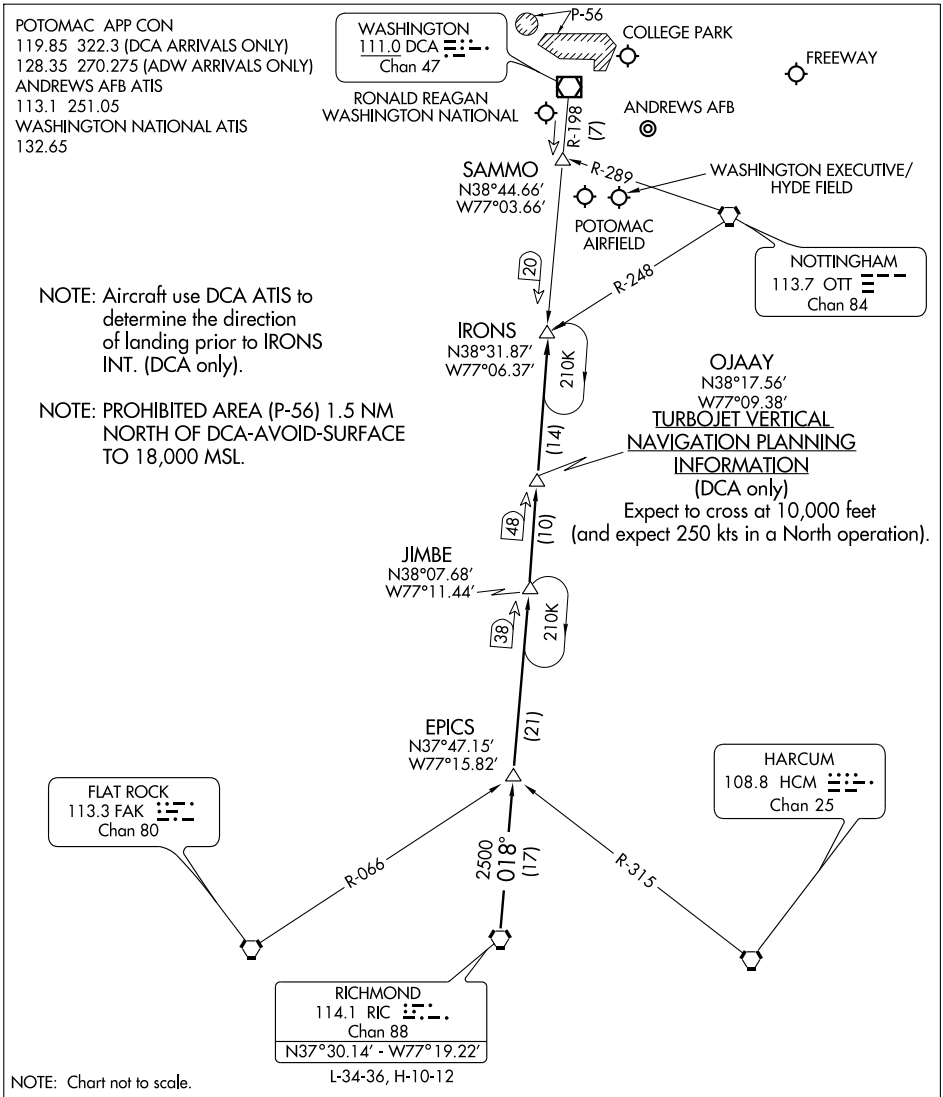
CATEGORY II ILS-SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



CATEGORY	A	B	C	D	E
S-ILS 19R	373/12		100		(RA 104)

IRONS FOUR ARRIVAL

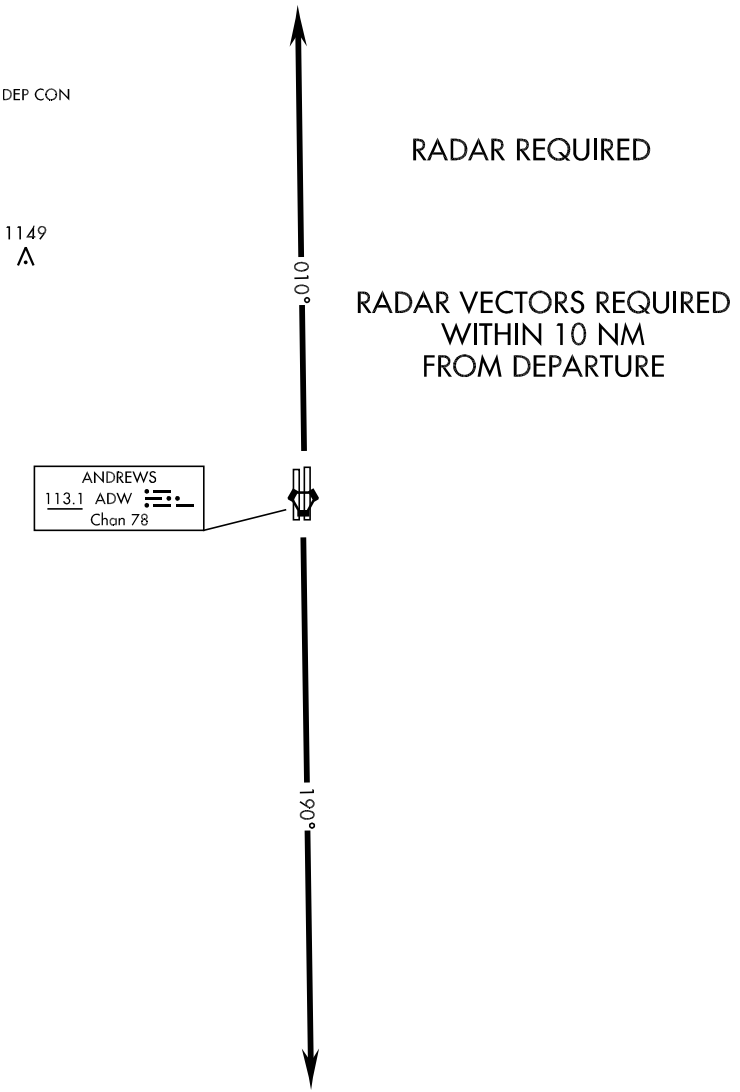
WASHINGTON, DC



RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence. . . .

. . . .From over IRONS INT:
Ronald Reagan Washington National Airport (DCA only):
LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to the final approach course.
LANDING NORTH: Expect vectors to final approach course.
All other airports: Expect vectors.

ATIS 113.1 251.05
GND CON
121.8 275.8
ANDREWS TOWER
118.4 349.0
POTOMAC TRACON DEP CON
125.65 348.725



NE-3, 17 DEC 2009 to 14 JAN 2010

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 1L/1R: Climb on track 010° to 3000. Expect radar vectors.

TAKE-OFF RWY 19R/19L: Climb on track 190° to 3000. Expect radar vectors to the South or East.

NDB RWY 1L

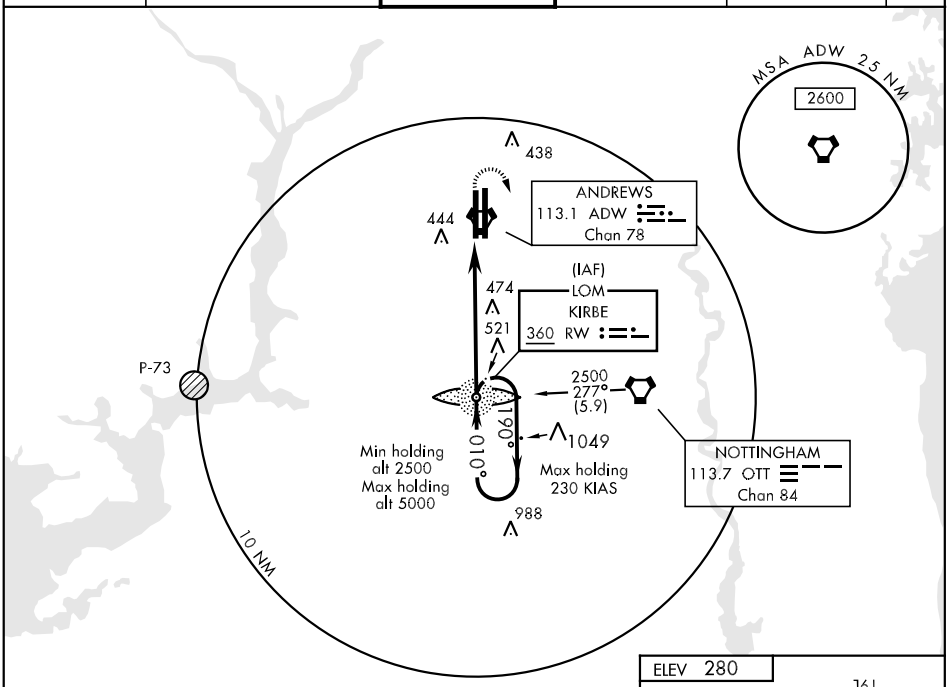
LOM RW	APCH CRS	Rwy ldg / TDZE / Arpt Elev	AL-561 [USAF]
360	010°	9300 / 260 / 280	ANDREWS AFB (KADW)

▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles, and CAT E vis to 2 miles.
** Circling not authorized W of Rwy 1L-19R.

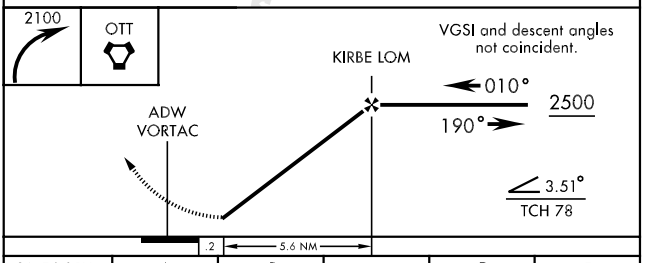
ALSF-2

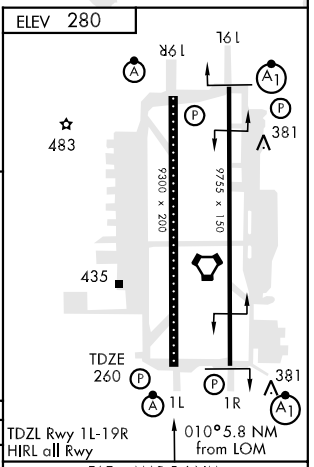
MISSED APPROACH: Climbing right turn to 2100 direct OTT VORTAC. Expect further clearance from APP CON.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	



EMERG SAFE ALT 100 NM 6300





CATEGORY	A	B	C	D	E
S-1L *	800/24 540 (600-½)		800/50 540 (600-1)	800/60 540 (600-1¼)	800-1½ 540 (600-1½)
CIRCLING **	800-1 520 (600-1)		800-1½ 520 (600-1½)	840-2 560 (600-2)	880-2 600 (600-2)

TDZL Rwy 1L-19R
HIRL all Rwy

010° 5.8 NM from LOM

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

NE-3, 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 1L

ANDREWS AFB (KADW)

APCH CRS	Rwy ldg	9300
010°	TDZE	260
	Arpt Elev	280

AL-561 [USAF]

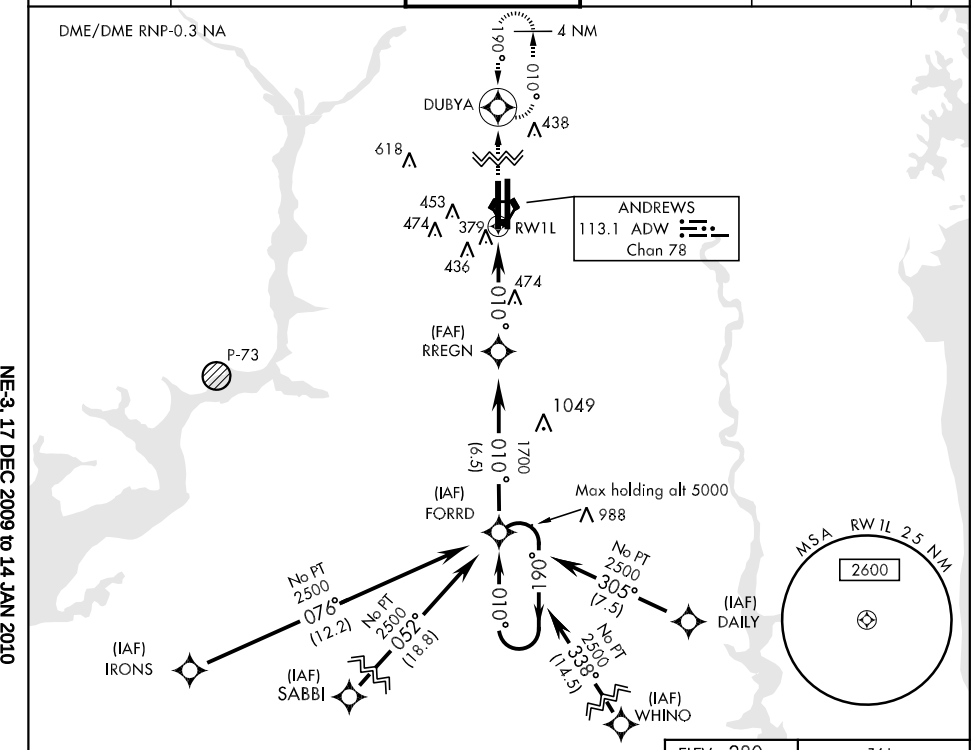
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling not authorized W of Rwy 1L-19R.

ALSF-2

MISSED APPROACH: Climb to 2600 direct DUBYA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	124.0 269.0	118.4 349.0	121.8 275.8	127.55 285.475	

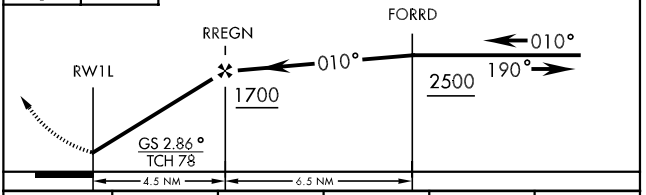
DME/DME RNP-0.3 NA

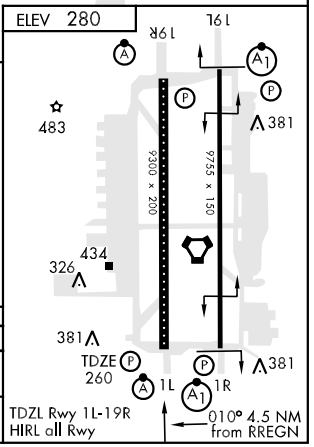


EMERG SAFE ALT 100 NM 6300

2600 | DUBYA

VGSI angle and descent angle not coincident.





CATEGORY	A	B	C	D	E
LNAV MDA*	760/24	500 (500-½)	760/40 500 (500-¾)	760/50 500 (500-1)	760/60 500 (500-1¼)
CIRCLING**	760-1	480 (500-1)	760-1½ 480 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 19R

APCH CRS	Rwy ldg	9300
190°	TDZE	273
	Arpt Elev	280

AL-561 [USAF]

ANDREWS AFB (KADW)

* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling not authorized W of Rwy 1L-19R.

ALSF-2

MISSED APPROACH: Climb to 2600 direct FORRD and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	124.0 269.0	118.4 349.0	121.8 275.8	127.55 285.475	

DME/DME RNP-0.3 NA

(IAF) YOKUM
(IAF) BELTS
(IAF) GEEMO
(IAF) DUBYA
(FAF) BUUSH
FORRD
RW19R
ANDREWS 113.1 ADW Chan 78
Max holding alt 5000
No PT 2600 224° (9.6)
No PT 2600 150° (7.1)
No PT 2600 271° (17.1)
190° 010° 461 503 395
190° (6) 2000
190° 190° 384 685 500 438 336 463
190° 010° 4 NM 474
1149 P-56B P-56A 620

MSA RW19R 25 NM
2600

EMERG SAFE ALT 100 NM 6300

ELEV 280
190° 5.0 NM from BUUSH
19R 19L
TDZE 273
483 381 434
9300 × 200
9755 × 150
1L 1R 381
TDZL Rwy 1L-19R HIRL all Rwy

2600 FORRD

010° DUBYA BUUSH 1.2 NM to RW19R RW19R
190° 2600 2000
3.08° TCH 91
6.0 NM 5.0 NM

CATEGORY	A	B	C	D	E
LNAV MDA *	740/24	467 (500-½)	740/40 467 (500-¾)	740/50 467 (500-1)	740/60 467 (500-1¼)
CIRCLING **	740-1	460 (500-1)	740-1½ 460 (500-½)	840-2 560 (600-2)	880-2 600 (600-2)

TACAN RWY 1L

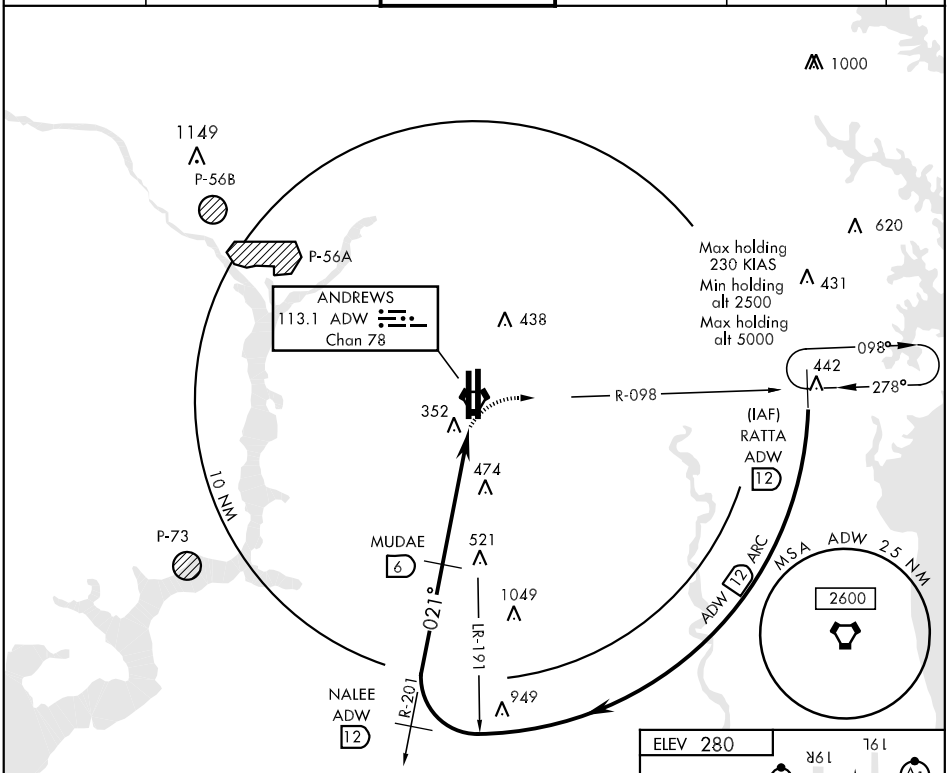
VORTAC ADW 113.1 Chan 78	APCH CRS 021°	Rwy ldg 9300 TDZE 260 Arpt Elev 280	AL-561 [USAF]	ANDREWS AFB (KADW)

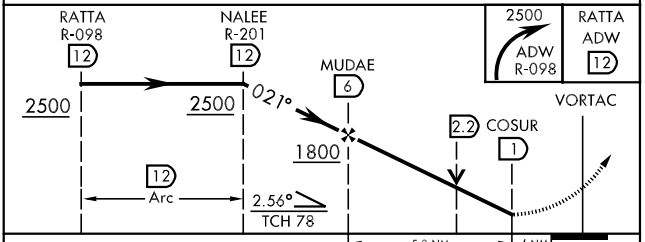
▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
** Circling not authorized W of Rwy 1L-19R.

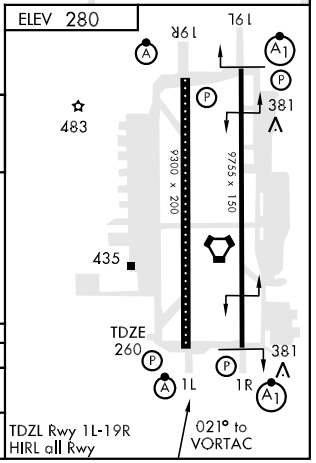
ALSF-2

MISSED APPROACH: Climb to 2500 via ADW VORTAC R-098 to RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	







CATEGORY	A	B	C	D	E
S-1L *	760/24 500	(500-½)	760/40 500 (500-¾)	760/50 500 (500-1)	760/60 500 (500-1¼)
CIRCLING **	760-1 480	(500-1)	760-1½ 480 (500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

TACAN RWY 1R

VORTAC ADW 113.1 Chan 78	APCH CRS 003°	Rwy ldg 9755 TDZE 265 Arpt Elev 280

AL-561 [USAF]

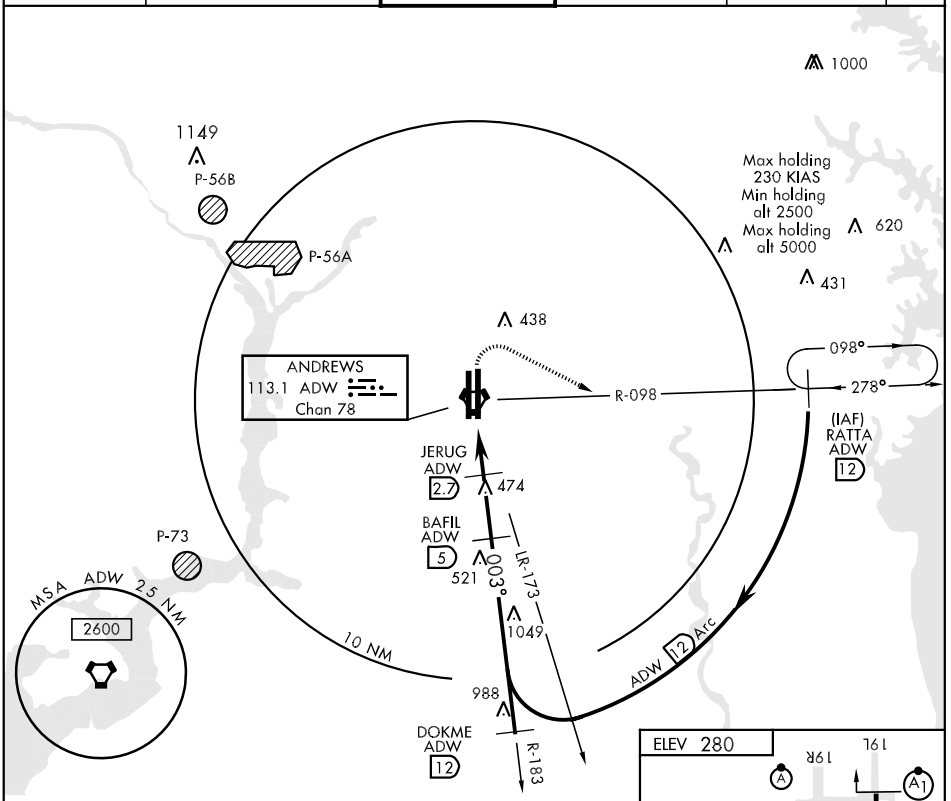
ANDREWS AFB (KADW)

▼ * When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT D RVR to 60 and vis to 1¼ miles, CAT E vis to 1½ miles.
** Circling not authorized W of Rwy 1L-19R.

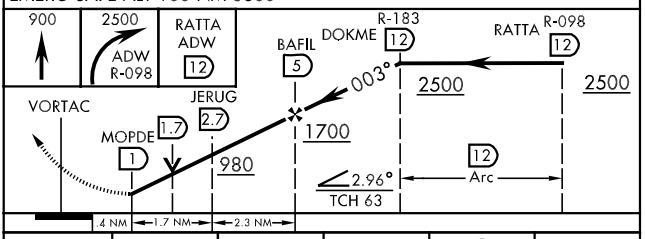
ALSF-1 (A1)

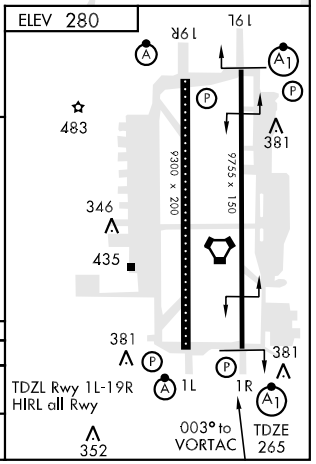
MISSED APPROACH: Climb to 900 then climbing right turn to 2500 to RATTA via ADW R-098 and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	



EMERG SAFE ALT 100 NM 6300





CATEGORY	A	B	C	D	E
S-1R *	660/40		395	(400-¾)	660/50 395 (400-1)
CIRCLING **	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460(500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

TACAN RWY 19L

VORTAC ADW 113.1 Chan 78	APCH CRS 196°	Rwy ldg 9755 TDZE 280 Arpt Elev 280

AL-561 [USAF]

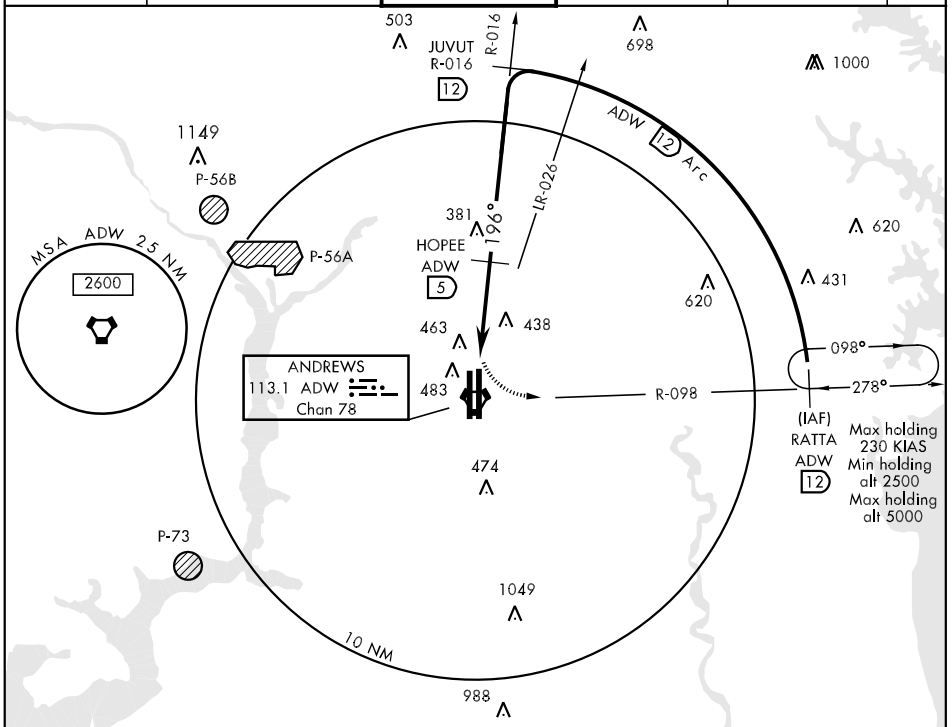
ANDREWS AFB (KADW)

▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles and CAT DE vis to 1½ miles.
** Circling not authorized W of Rwy 1L-19R.

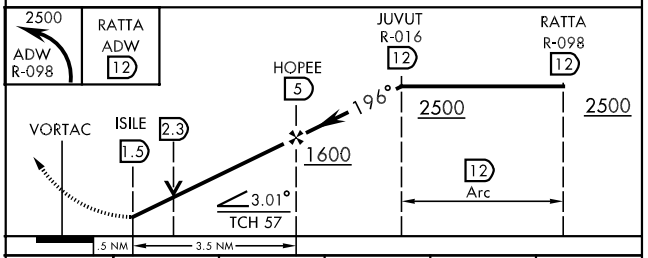
ALSF-1 (A1)

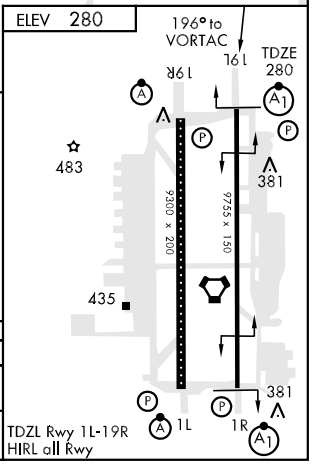
MISSED APPROACH: Climbing left turn to 2500 via ADW TACAN R-098 to RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	



EMERG SAFE ALT 100 NM 6300





CATEGORY	A	B	C	D	E
S-19L *	720/40	440	(500-¾)	720/50	440 (500-1)
CIRCLING **	720-1 440 (500-1)	740-1 460 (500-1)	740-1½ 460(500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

TACAN RWY 19R

VORTAC ADW	APCH CRS	Rwy ldg 9300
113.1	182°	TDZE 273
Chan 78		Arpt Elev 280

AL-561 [USAF]

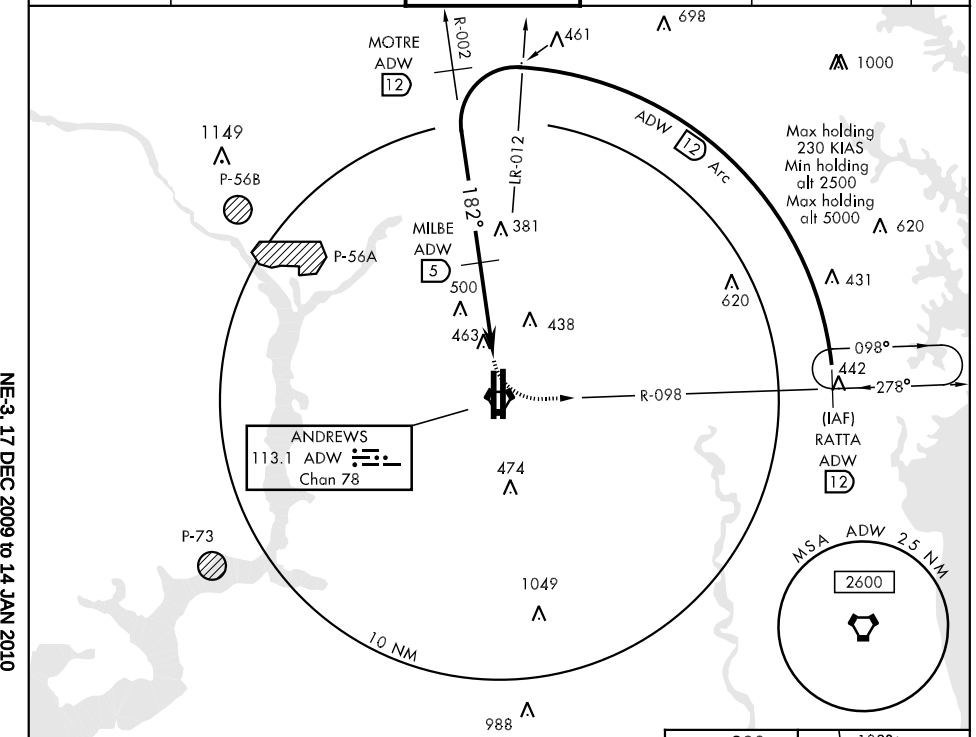
ANDREWS AFB (KADW)

▼ * When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT CD vis to 1½ miles, CAT E vis to 1¾.
** Circling not authorized W of Rwy 1L-19R.

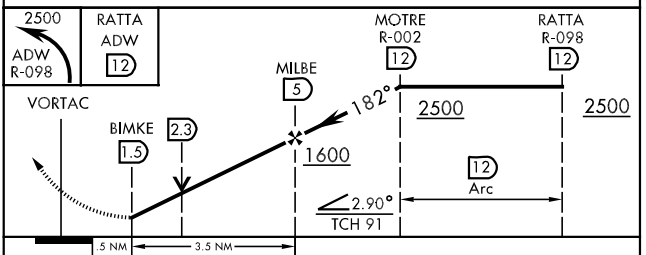
ALSF-2

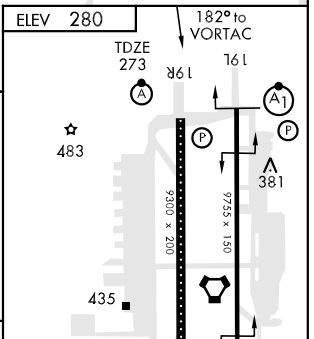
MISSED APPROACH: Climbing left turn to 2500 via ADW TACAN R-098 to RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	



EMERG SAFE ALT 100 NM 6300





CATEGORY	A	B	C	D	E
S-19R *	780/24 507 (500-½)		780/50 507 (500-1)		780/60 507(500-1¼)
CIRCLING **	780-1 500 (500-1)		780-1½ 500(500-1½)	840-2 560 (600-2)	880-2 600 (600-2)

VOR/DME or TACAN-A

VORTAC ADW 113.1 Chan 78	APCH CRS 278°	Rwy ldg NA TDZE NA Arpt Elev 280

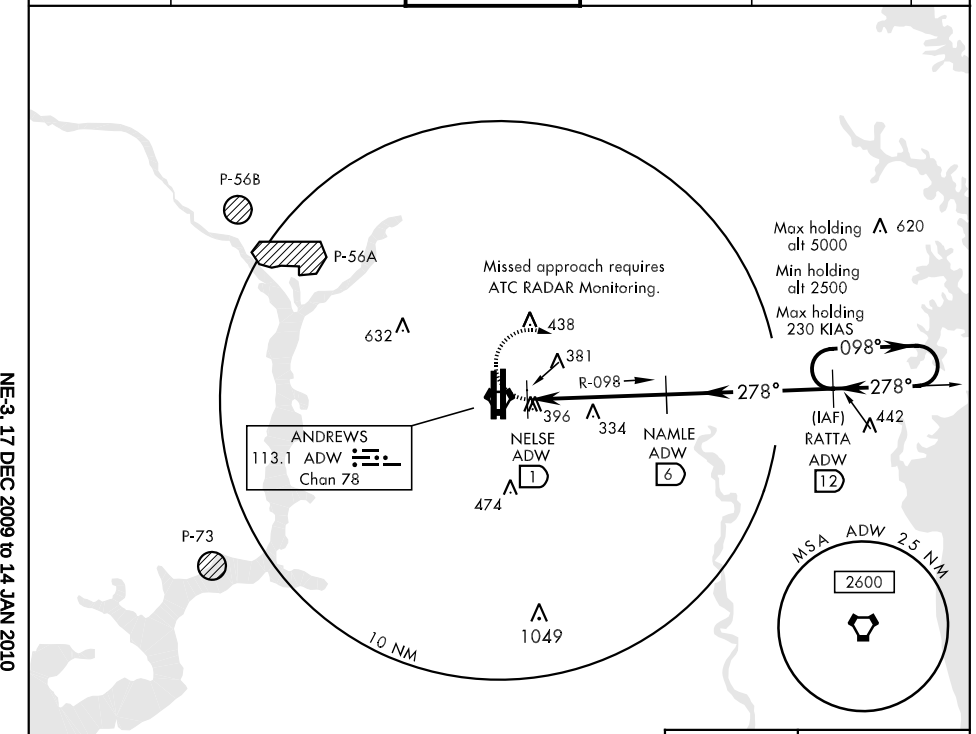
AL-561 [USAF]

ANDREWS AFB (KADW)

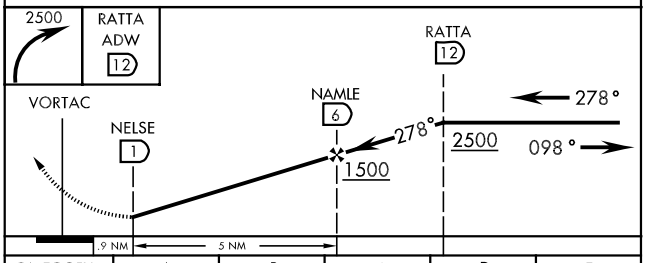
* Circling not authorized west of RWY 1L-19R.

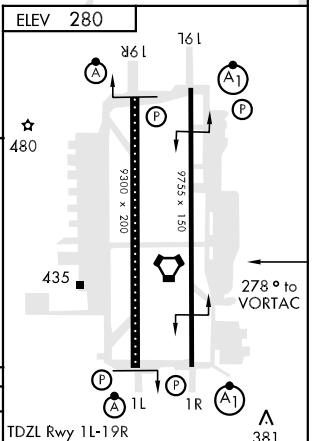
MISSED APPROACH: Climbing right turn to 2500 DIRECT RATTA and hold.

ATIS	POTOMAC APP CON	ANDREWS TOWER	GND CON	CLNC DEL	ASR
113.1 251.05	119.3 335.5	118.4 349.0	121.8 275.8	127.55 285.475	

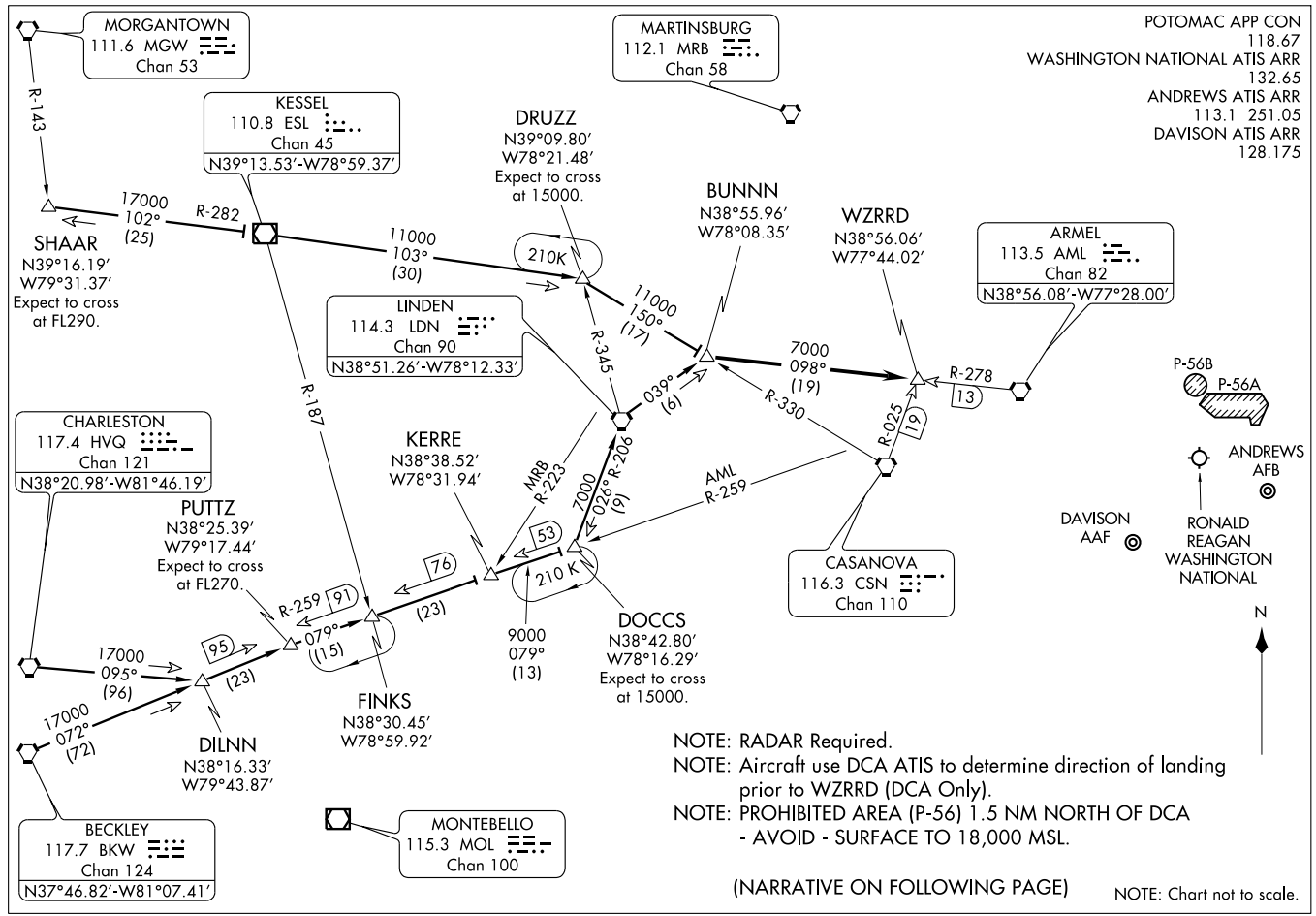


EMERG SAFE ALT 100 NM 6300





CATEGORY	A	B	C	D	E
CIRCLING *	820-1	540 (600-1)	820-1½	840-2	880-2
			540 (600-1½)	560 (600-2)	600 (600-2)


MORGANTOWN
111.6 MGW
Chan 53
MARTINSBURG
112.1 MRB
Chan 58
POTOMAC APP CON
118.67
WASHINGTON NATIONAL ATIS ARR
132.65
ANDREWS ATIS ARR
113.1 251.05
DAVISON ATIS ARR
128.175
KESSEL
110.8 ESL
Chan 45
N39°13.53'-W78°59.37'
DRUZZ
N39°09.80'
W78°21.48'
Expect to cross
at 15000.
BUNNN
N38°55.96'
W78°08.35'
WZRRD
N38°56.06'
W77°44.02'
ARMEL
113.5 AML
Chan 82
N38°56.08'-W77°28.00'
SHAAR
N39°16.19'
W79°31.37'
Expect to cross
at FL290.
LINDEN
114.3 LDN
Chan 90
N38°51.26'-W78°12.33'
P-56B
P-56A
ANDREWS
AFB
CHARLESTON
117.4 HVQ
Chan 121
N38°20.98'-W81°46.19'
KERRE
N38°38.52'
W78°31.94'
PUTTZ
N38°25.39'
W79°17.44'
Expect to cross
at FL270.
DAVISON
AAF
RONALD
REAGAN
WASHINGTON
NATIONAL
CASANOVA
116.3 CSN
Chan 110
DOCCS
N38°42.80'
W78°16.29'
Expect to cross
at 15000.
FINKS
N38°30.45'
W78°59.92'
DILNN
N38°16.33'
W79°43.87'
MONTEBELLO
115.3 MOL
Chan 100
BECKLEY
117.7 BKW
Chan 124
N37°46.82'-W81°07.41'
N
R-143
17000
102°
(25)
R-282
11000
103°
(30)
210K
R-345
11000
150°
(17)
039°
(6)
7000
098°
(19)
R-330
R-278
13
R-025
19
R-187
MRB
R-223
7000
026°
(9)
R-206
AML
R-259
53
76
(23)
210 K
9000
079°
(13)
R-259
91
079°
(115)
95
(23)
17000
095°
(96)
17000
072°
(72)
NOTE: RADAR Required.
NOTE: Aircraft use DCA ATIS to determine direction of landing
prior to WZRRD (DCA Only).
NOTE: PROHIBITED AREA (P-56) 1.5 NM NORTH OF DCA
- AVOID - SURFACE TO 18,000 MSL.
(NARRATIVE ON FOLLOWING PAGE)
NOTE: Chart not to scale.

WZRRD TWO ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BECKLEY TRANSITION (BKW.WZRRD2): From over BKW VORTAC via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence . . . .

CHARLESTON TRANSITION (HVQ.WZRRD2): From over HVQ VORTAC via HVQ R-095 to DILNN INT, then via BKW R-072 to PUTTZ INT, then via AML R-259 to DOCCS INT, then via LDN R-206 to LDN VORTAC, then via LDN R-039 to BUNNN INT, thence . . . .

SHAAR TRANSITION (SHAAR.WZRRD2): From over SHAAR INT via ESL R-282 to ESL VOR/DME, then via R-103 to DRUZZ INT, then via CSN R-330 to BUNNN, thence . . . .

. . . . from over BUNNN INT via AML R-278 to WZRRD INT. Expect vectors to final approach course after WZRRD INT.

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy ldg	2000
104°	TDZE	409
	Apt Elev	409

GPS RWY 10

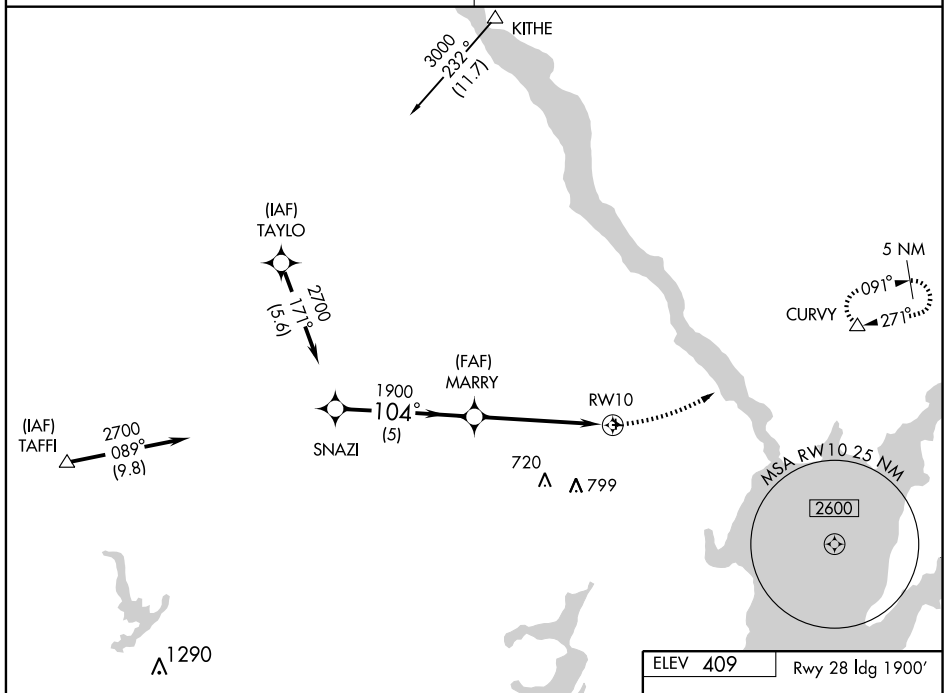
CHURCHVILLE/ HARFORD COUNTY (ØW3)

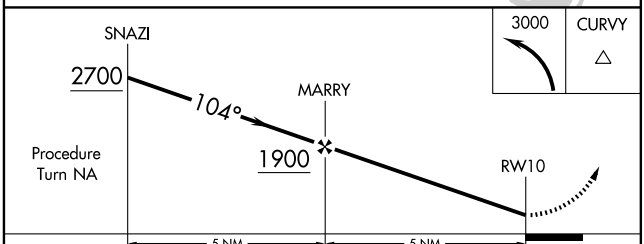
Use Phillips AAF altimeter setting; if not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

NA

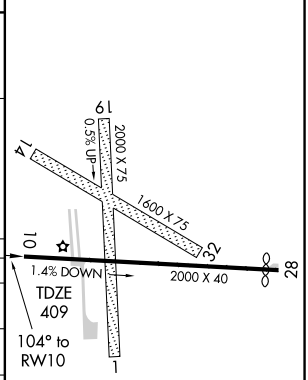
MISSED APPROACH: Climbing left turn to 3000 direct CURVY WP and hold.

POTOMAC APP CON	UNICOM
125.525 291.625	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-10	860-1 451 (500-1)	NA		
CIRCLING	900-1 491 (500-1)	NA		
BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL ALTIMETER SETTING MINIMUMS				
S-10	920-1 511 (600-1)	NA		
CIRCLING	940-1 531 (600-1)	NA		



LIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VOR/DME PPM	APP CRS	Rwy Idg	N/A
108.4	176°	TDZE	N/A
Chan 21		Apt Elev	409

VOR/DME-A

CHURCHVILLE/ HARFORD COUNTY (ØW3)

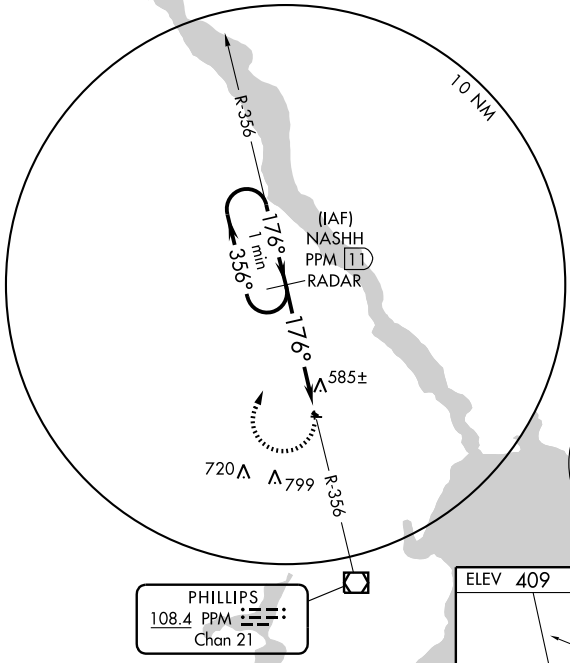
Use Phillips AAF altimeter setting; if not received, use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

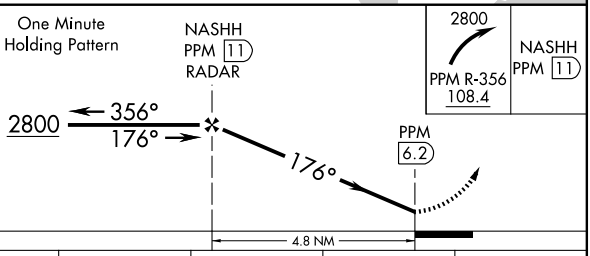
NA

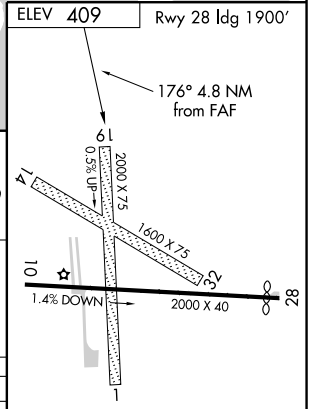
MISSED APPROACH: Climbing right turn to 2800 via PPM R-356 to NASHH 11 DME/RADAR and hold.

POTOMAC APP CON	UNICOM
125.525 291.625	122.8 (CTAF) L

RADAR REQUIRED







LIRL Rwy 10-28 L
REIL Rwys 10 and 28 L

CATEGORY	A	B	C	D
CIRCLING	960-1 551 (600-1)	NA		

BALTIMORE/WASHINGTON INTL THURGOOD MARSHALL ALTIMETER SETTING MINIMUMS

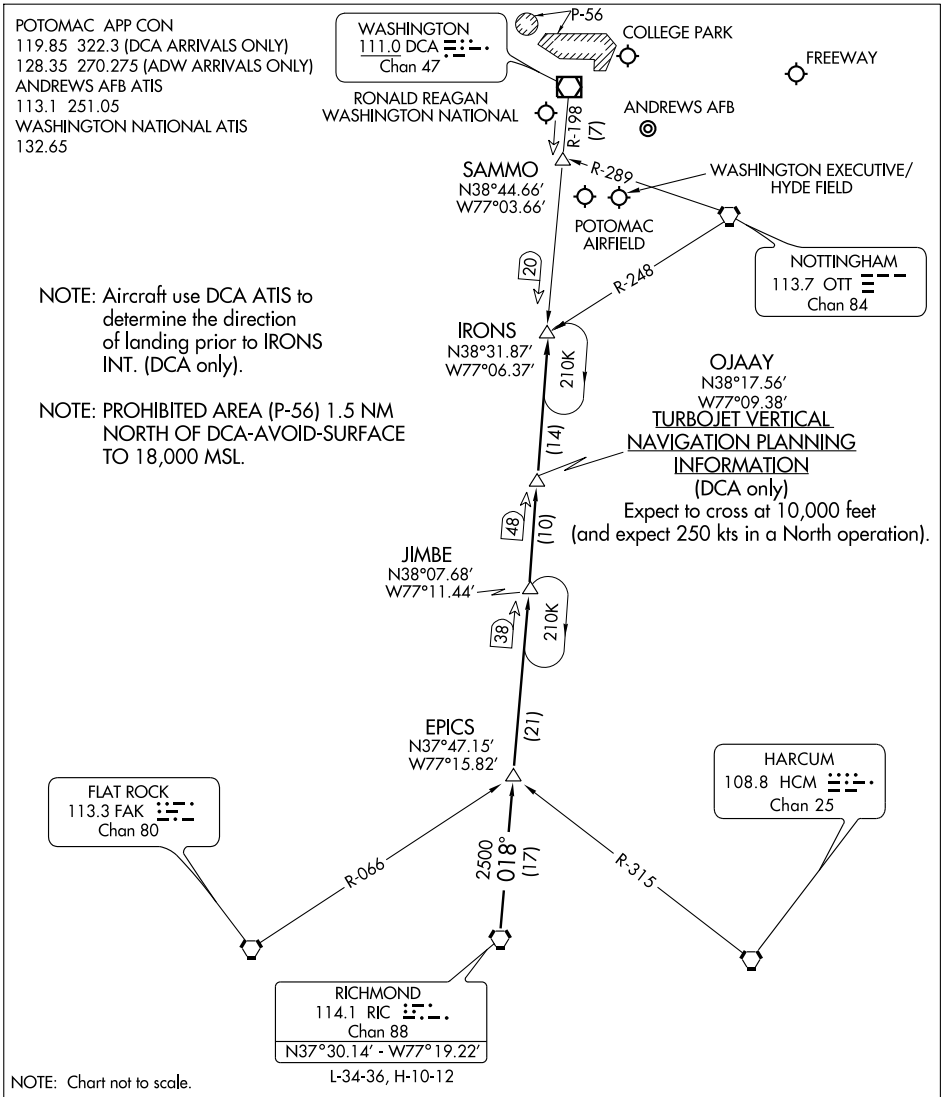
CIRCLING	1000-1 591 (600-1)	NA		

Knots	60	90	120	150	180
Min:Sec					

NE-3. 17 DEC 2009 to 14 JAN 2010

IRONS FOUR ARRIVAL

WASHINGTON, DC



RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence. . . .

. . . .From over IRONS INT:
Ronald Reagan Washington National Airport (DCA only):
LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to the final approach course.
LANDING NORTH: Expect vectors to final approach course.
All other airports: Expect vectors.

APP CRS		
052°	Rwy Idg	3000
	TDZE	249
	Apt Elev	249

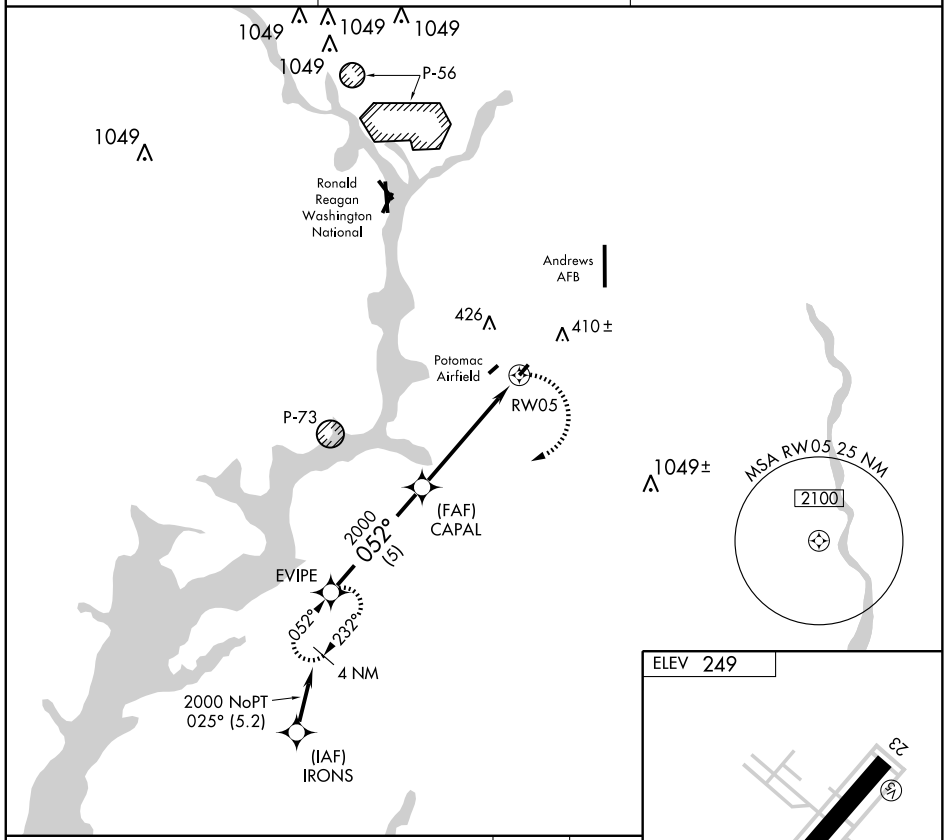
RNAV (GPS) RWY 5

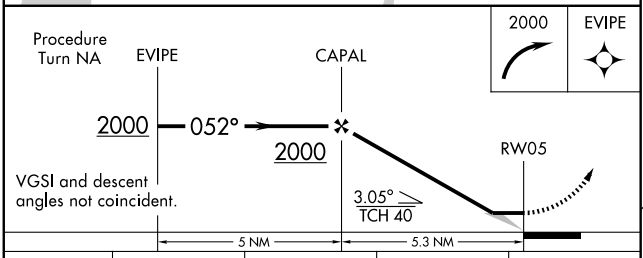
CLINTON/ WASHINGTON EXECUTIVE/HYDE FIELD (W32)

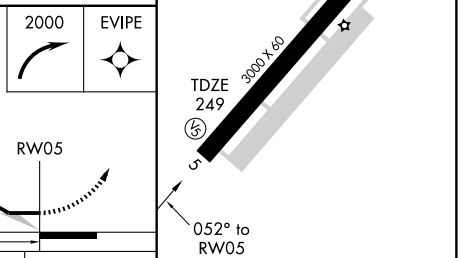
Use Andrews AFB altimeter setting.
Circling NW Rwy 5-23 NA.
NA GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2000 direct EVIPE WP and hold.

ANDREWS ATIS	POTOMAC APP CON	UNICOM
113.1	124.7 338.2	122.8 (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	660-1 411 (500-1)		NA	
CIRCLING	660-1 411 (500-1)	700-1 451 (500-1)	NA	

LIRL Rwy 5-23
REIL Rwy 5

NE-3. 17 DEC 2009 to 14 JAN 2010

CLINTON, MARYLAND

AL-6996 (FAA)

VORTAC ADW	APP CRS	Rwy Idg	3000
113.1	051°	TDZE	249
Chan 78		Apt Elev	249

VOR/DME RWY 5

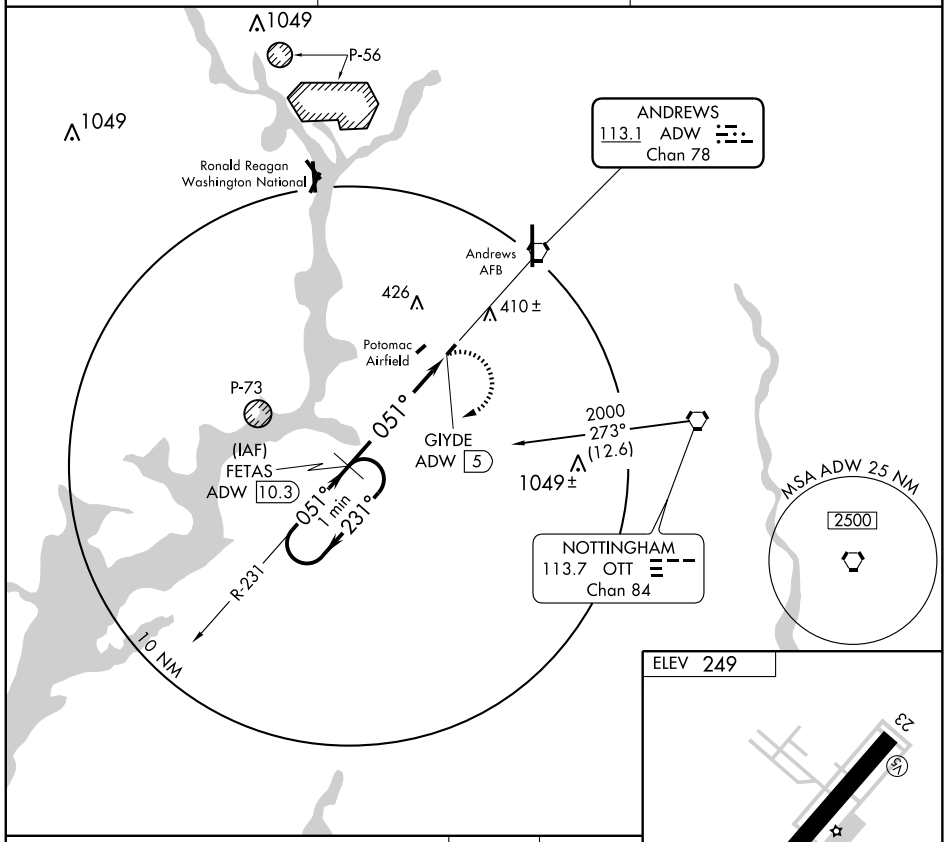
CLINTON/ WASHINGTON EXECUTIVE/HYDE FIELD (W32)

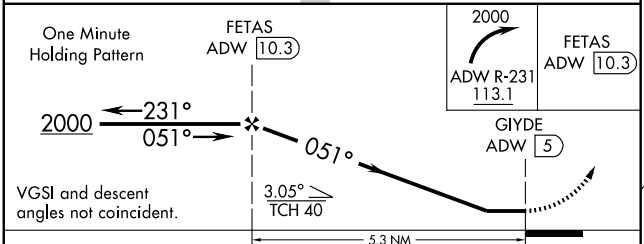
Use Andrews AFB altimeter setting.
Circling NW Rwy 5-23 NA.

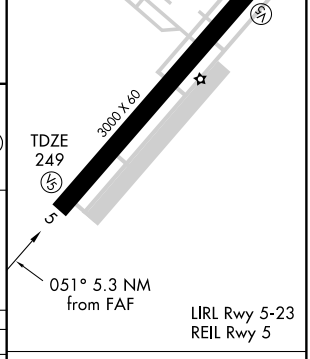
NA

MISSED APPROACH: Climbing right turn to 2000 via ADW R-231 to FETAS/ADW 10.3 DME and hold.

ANDREWS ATIS	POTOMAC APP CON	UNICOM
113.1	124.7 338.2	122.8 (CTAF)







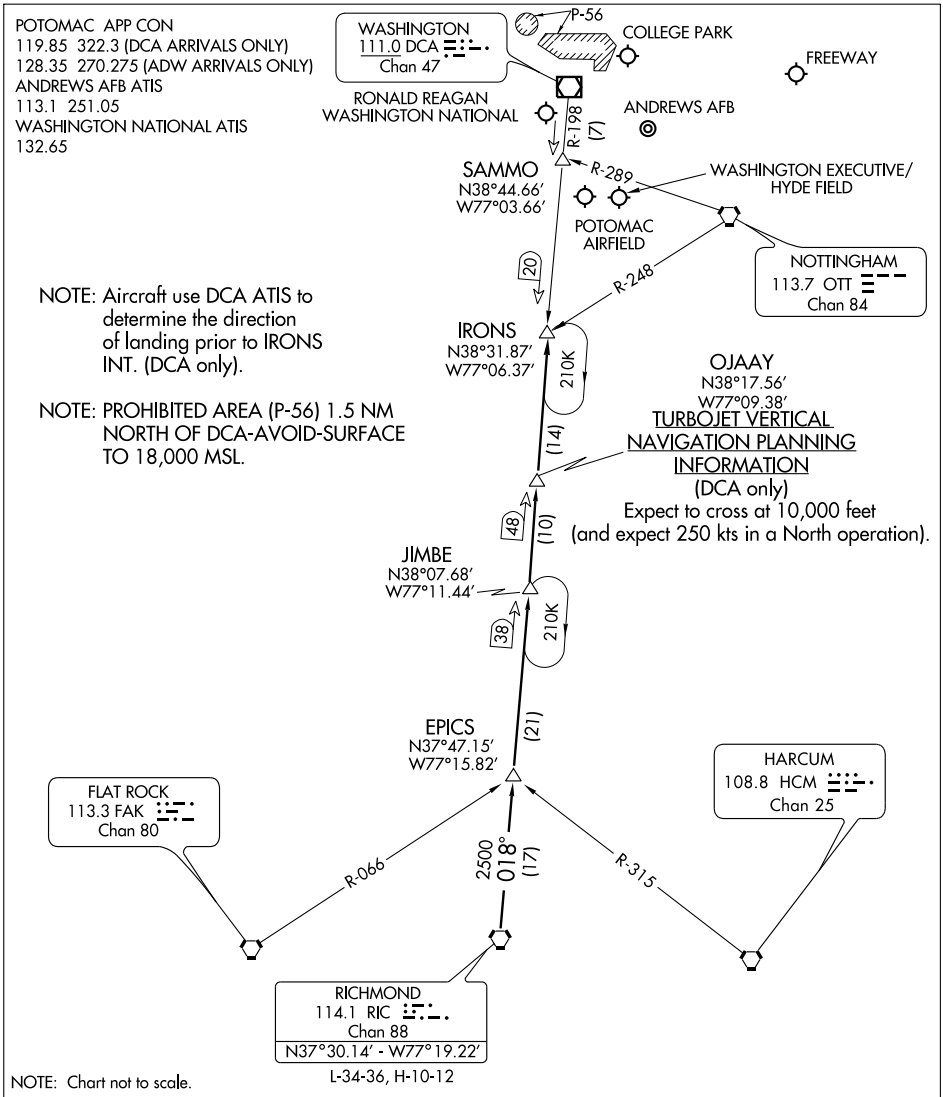
CATEGORY	A	B	C	D
S-5	660-1 411 (500-1)		NA	
CIRCLING	660-1 411 (500-1)	700-1 451 (500-1)	NA	

Knots	60	90	120	150	180
Min:Sec					

NE-3. 17 DEC 2009 to 14 JAN 2010

IRONS FOUR ARRIVAL

WASHINGTON, DC



RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence. . . .

. . . .From over IRONS INT:
Ronald Reagan Washington National Airport (DCA only):
LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to the final approach course.
LANDING NORTH: Expect vectors to final approach course.
All other airports: Expect vectors.

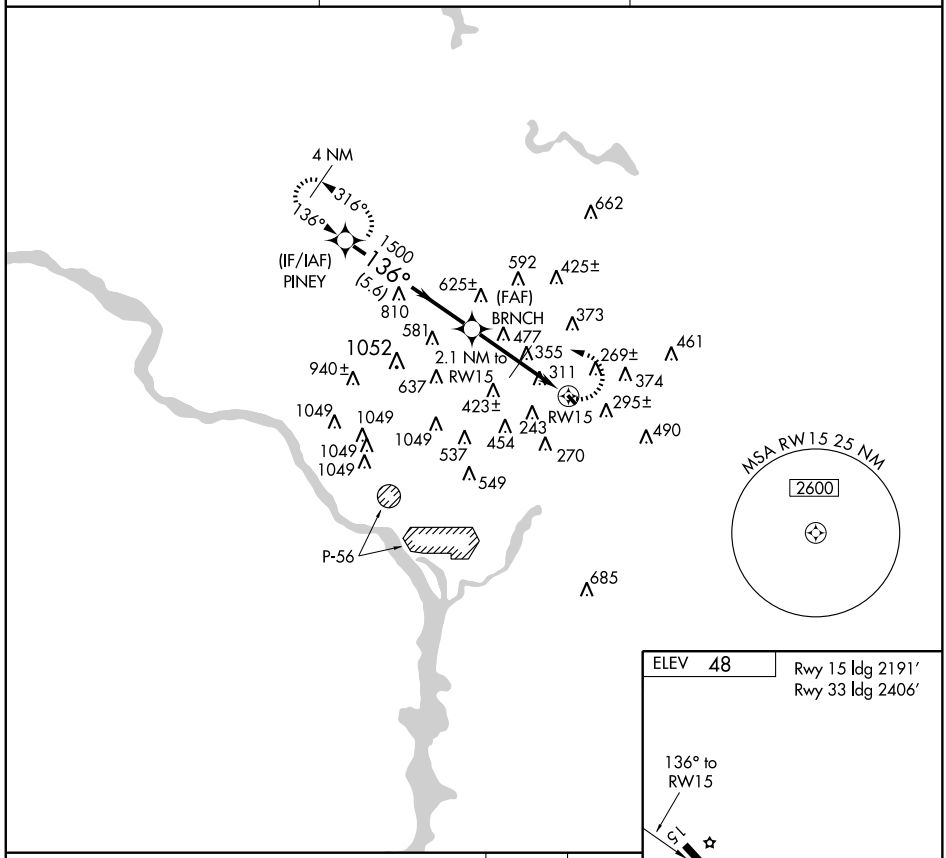
APP CRS	Rwy Idg	2191
136°	TDZE	47
	Apt Elev	48

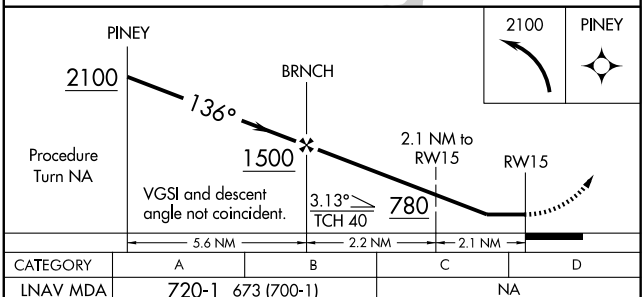
RNAV (GPS) RWY 15
COLLEGE PARK (CGS)

When local altimeter setting not received, use Ronald Reagan Washington National altimeter setting.
DME/DME RNP-0.3 NA.

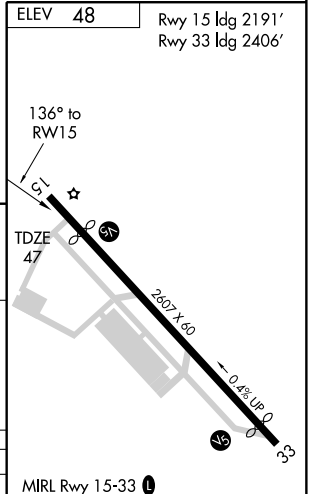
MISSED APPROACH: Climbing left turn to 2100 direct PINEY WP and hold.

AWOS-3	POTOMAC APP CON		UNICOM
121.225	119.85	322.3	122.975 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	720-1	673 (700-1)	NA	
CIRCLING	760-1	712 (800-1)	NA	



MIRL Rwy 15-33 L
REIL Rwys 15 and 33 L

NE-3, 17 DEC 2009 to 14 JAN 2010

CRISFIELD, MARYLAND AL-10239 (FAA)

APP CRS	Rwy Idg	2490
322°	TDZE	4
	Apt Elev	4

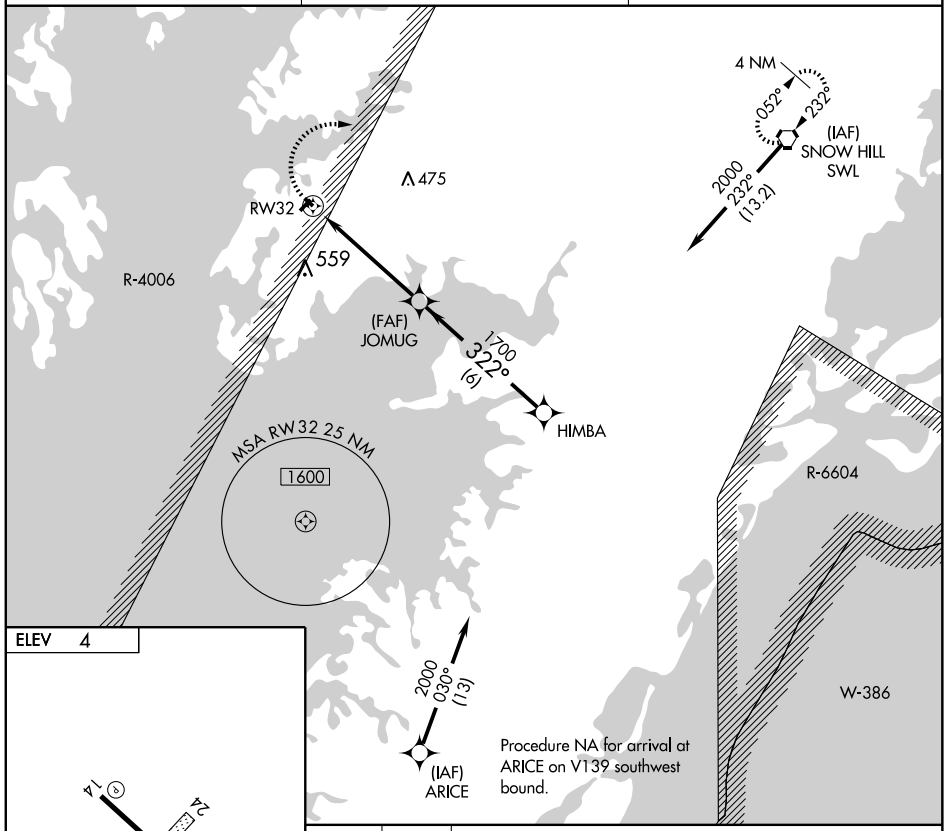
RNAV (GPS) RWY 32
CRISFIELD MUNI (W41)

NA

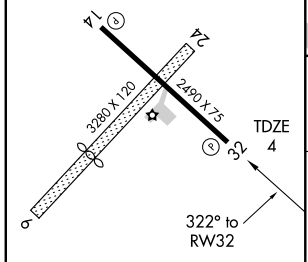
Use NASA Wallops Flight Facility, VA altimeter setting; if not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all MDAs 20 feet. Circling NA Rwy 6-24. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2000 direct SWL VORTAC and hold.

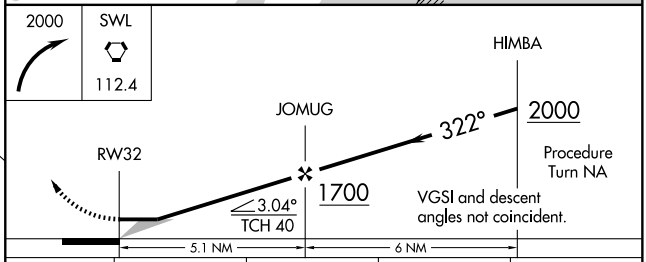
WALLOPS ASOS	PATUXENT APP CON ★	UNICOM
119.175	127.95 314.0	122.8 (CTAF) L



ELEV 4



MIRL Rwy 14-32 L
REIL Rwys 14 and 32 L



CATEGORY	A	B	C	D
LNAV MDA	500-1 496 (500-1)		NA	
CIRCLING	520-1 516 (600-1)		NA	

NE-3, 17 DEC 2009 to 14 JAN 2010

CRISFIELD, MARYLAND

AL-10239 (FAA)

09323

VOR/DME-A

CRISFIELD MUNI (W41)

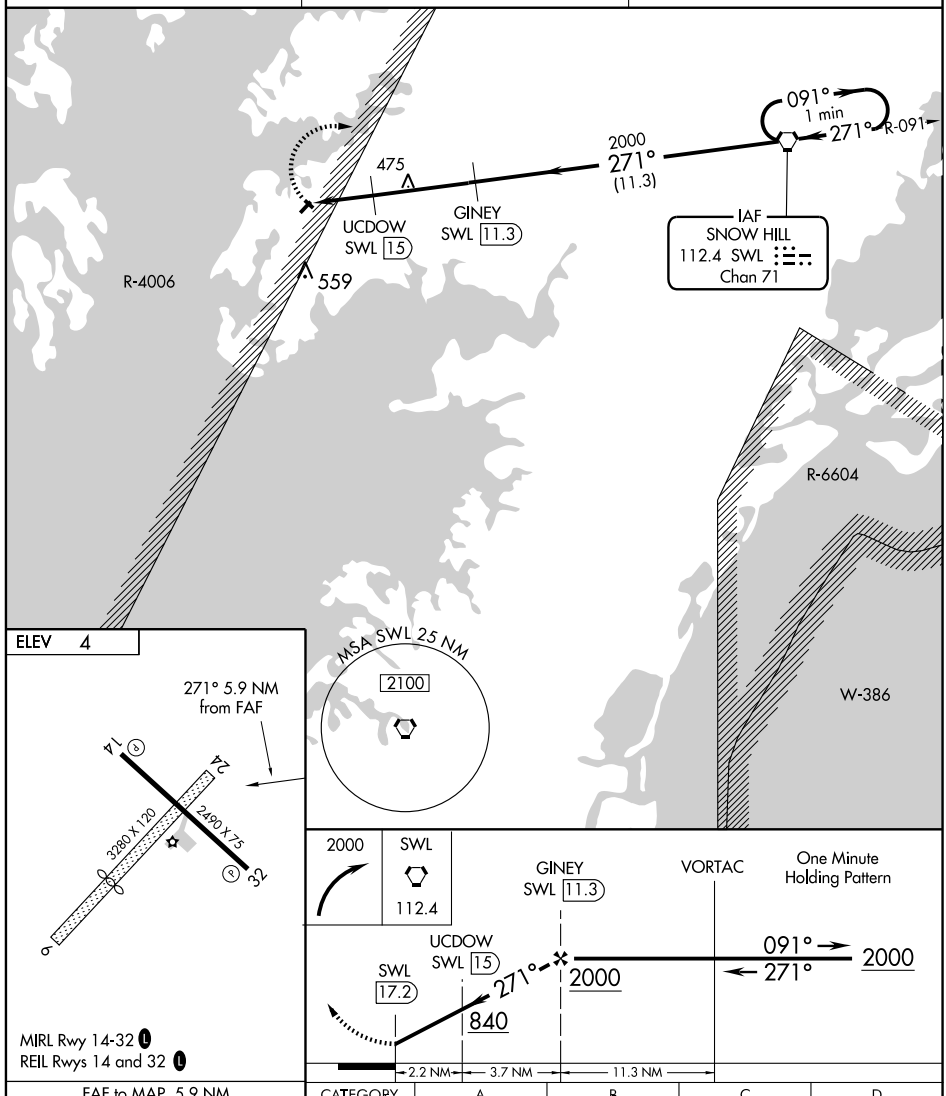
VORTAC SWL 112.4 Chan 71	APP CRS 271°	Rwy ldg N/A TDZE N/A Apt Elev 4

NA

Use NASA Wallops Flight Facility, VA altimeter setting; if not received, use Salisbury-Ocean City Wicomico Rgnl altimeter setting and increase all MDAs 20 feet. Circling NA Rwy 6-24.

MISSED APPROACH: Climbing right turn to 2000 direct SWL VORTAC and hold.

WALLOPS ASOS	PATUXENT APP CON ★	UNICOM
119.175	127.95 314.0	122.8 (CTAF) L



MIRL Rwy 14-32 L

REIL Rwys 14 and 32 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
CIRCLING	780-1 776 (800-1)	780-1¼ 776 (800-1¼)	NA	

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC/DME I-CBE	APP CRS	Rwy Idg	N/A
110.5	224°	TDZE	N/A
Chan 42		Apt Elev	775

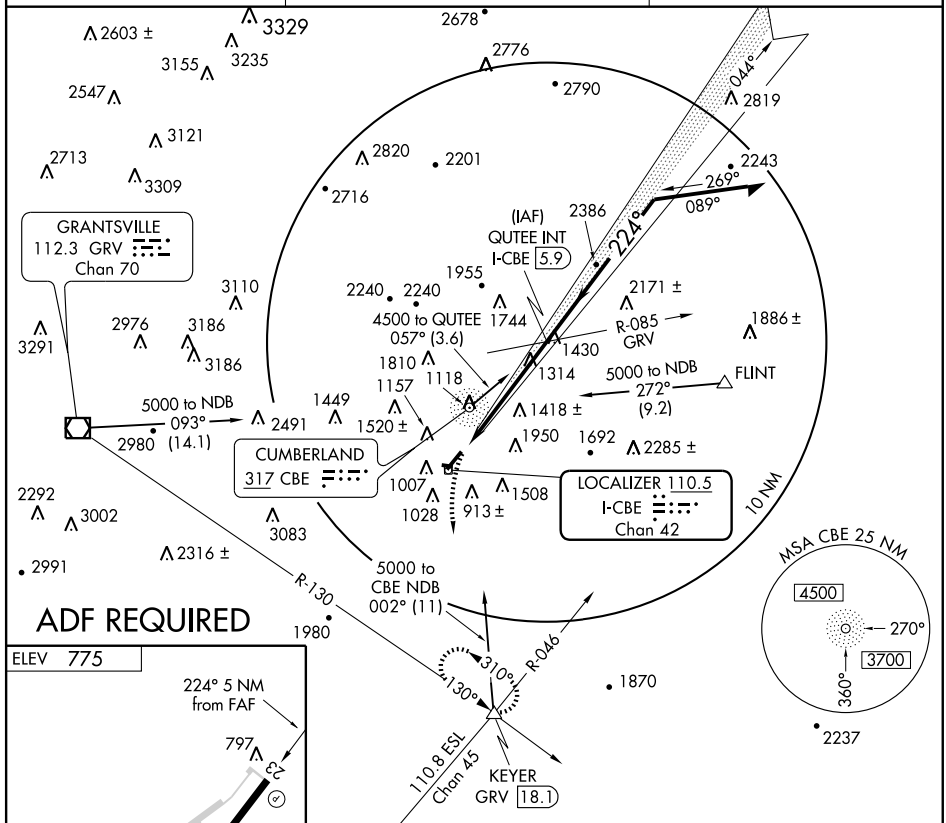
LOC-A

CUMBERLAND / GREATER CUMBERLAND RGNL (CBE)

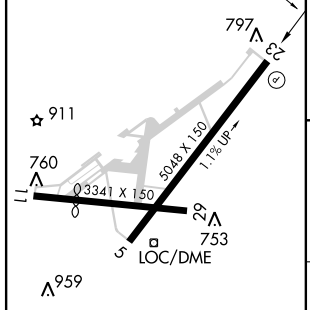
V
A NA Circling not authorized northwest of Rwy 5-23

MISSED APPROACH: Climbing left turn to 5000 via heading 184° and GRV R-130 to KEYER Int and hold.

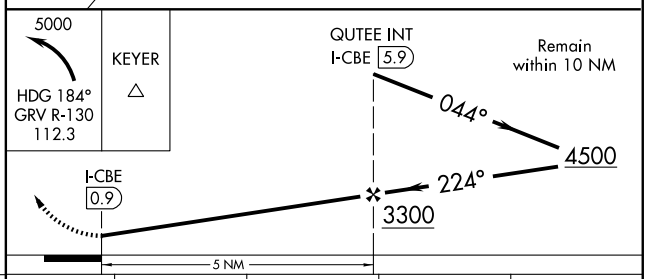
AWOS-3	CLEVELAND CENTER	UNICOM
128.625	124.4 327.1	122.8 (CTAF) L



ADF REQUIRED



REIL Rwy 23 L
LIRL Rwy 11-29 L
HIRL Rwy 5-23 L



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
CIRCLING	2060-1¼ 1285 (1300-1¼)	2060-1½ 1285 (1300-1½)	2060-3 1285 (1300-3)	2340-3 1565 (1600-3)

NE-3, 17 DEC 2009 to 14 JAN 2010

LOC/DME I-CBE	APP CRS	Rwy Idg	5048
110.5	224°	TDZE	775
Chan 42		Apt Elev	775

LOC/DME RWY 23

CUMBERLAND / GREATER CUMBERLAND RGNL (CBE)

Circling not authorized northwest of Rwy 5-23

MISSED APPROACH: Climbing left turn to 5000 via heading 184° and GRV R-130 to KEYER Int and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
128.625	124.4 327.1	122.8 (CTAF)

GRANTSVILLE 112.3 GRV Chan 70

CUMBERLAND 317 CBE

5000 to NDB 093° (14.1)

5000 to NDB 272° (9.2) FLINT

(IAF) HOLOE INT I-CBE 6.6

4500 to HOLOE 055° (4.3)

I-CBE 10

I-CBE 3.1

LOCALIZER 110.5 I-CBE Chan 42

10 NM

5000 to CBE NDB 002° (11)

R-130 R-046 310° 130°

110.8 ESL Chan 45 KEYER GRV 18.1

ADF REQUIRED

MSA CBE 25 NM

4500 270° 3700 360°

ELEV 775

224° 5.7 NM from FAF

TDZE 775

5048 X 150

3341 X 150

1.1% UP

LOC/DME

5000 HDG 184° GRV R-130 112.3

KEYER

HOLOE INT I-CBE 6.6

Remain within 10 NM

044° 4300

224° 3500

I-CBE 0.9 I-CBE 2.5 I-CBE 3.1 I-CBE 10

3.59° TCH 35

1640 3000

VGSI and descent angles not coincident.

1.6 NM 0.6 NM 3.5 NM 3.4 NM

CATEGORY	A	B	C	D
S-23	1400-1 625 (700-1)		1400-1¾ 625 (700-1¾)	1400-2 625 (700-2)
CIRCLING	2060-1¼ 1285 (1300-1¼)	2060-1½ 1285 (1300-1½)	2060-3 1285 (1300-3)	2340-3 1565 (1600-3)

REIL Rwy 23 L
LIRL Rwy 11-29 L
HIRL Rwy 5-23 L

NE-3, 17 DEC 2009 to 14 JAN 2010

CUMBERLAND, MARYLAND AL-5263 (FAA)

APP CRS	Rwy Idg	5048
031°	TDZE	747
	Apt Elev	775

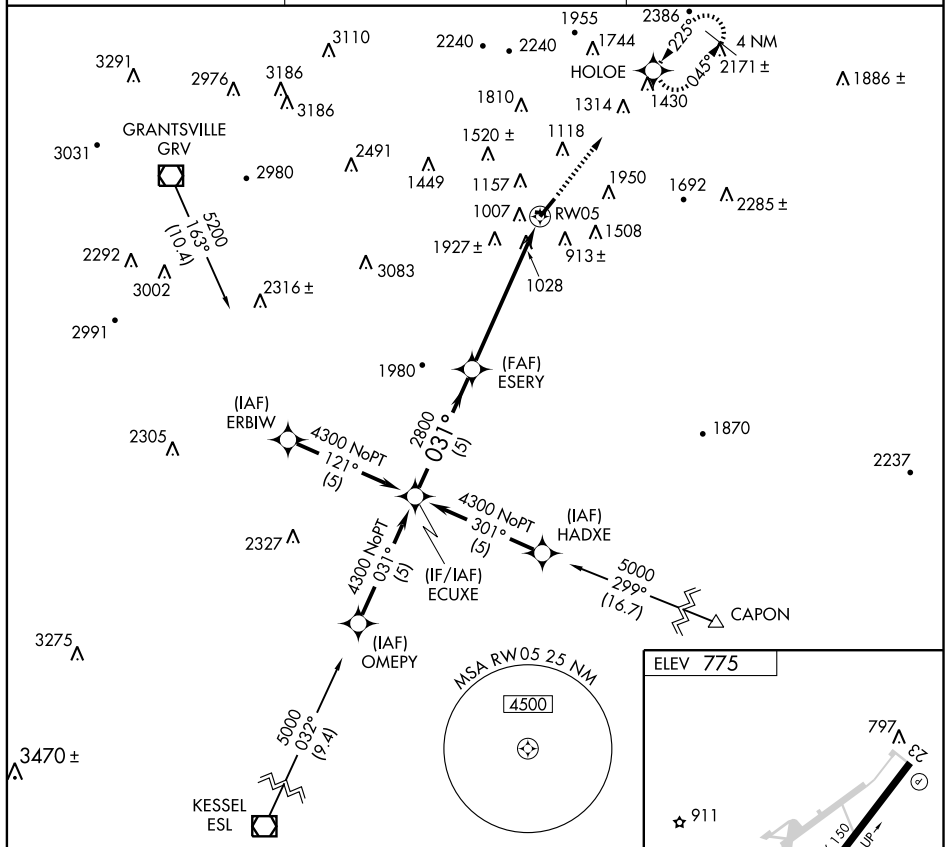
RNAV (GPS) RWY 5

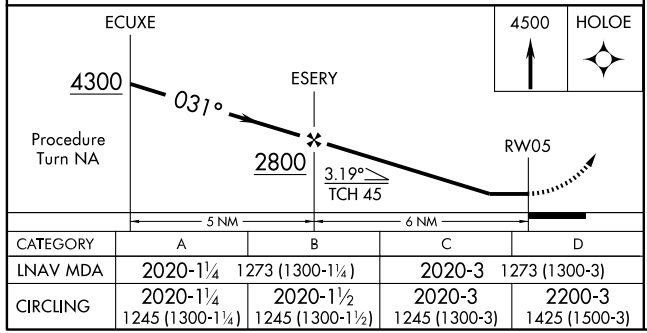
CUMBERLAND / GREATER CUMBERLAND RGNL (CBE)

Circling not authorized NW of Rwy 5-23.
GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA.

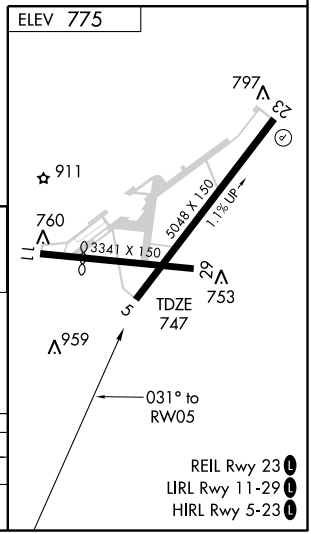
MISSED APPROACH: Climb to 4500 direct HOLOE WP and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
128.625	124.4 327.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	2020-1¼ 1273 (1300-1¼)		2020-3 1273 (1300-3)	
CIRCLING	2020-1¼ 1245 (1300-1¼)	2020-1½ 1245 (1300-1½)	2020-3 1245 (1300-3)	2200-3 1425 (1500-3)



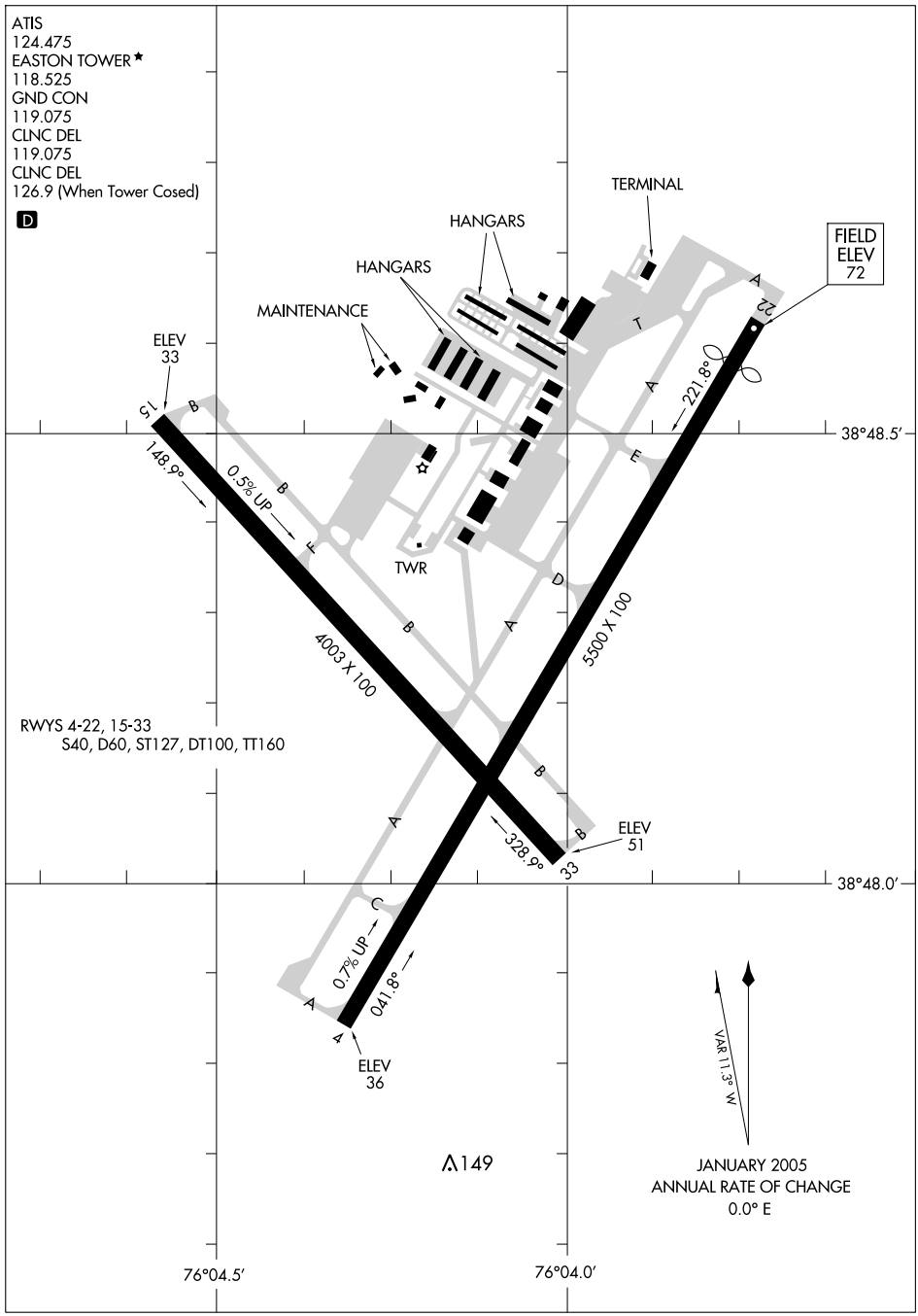
NE-3, 17 DEC 2009 to 14 JAN 2010

09127

AIRPORT DIAGRAM

AL-5596 (FAA)

EASTON/NEWNAM FIELD (ESN)
EASTON, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

LOC/DME I-FGH	APP CRS	Rwy Idg	4775
109.35	041°	TDZE	58
Chan 30 (Y)		Apt Elev	72

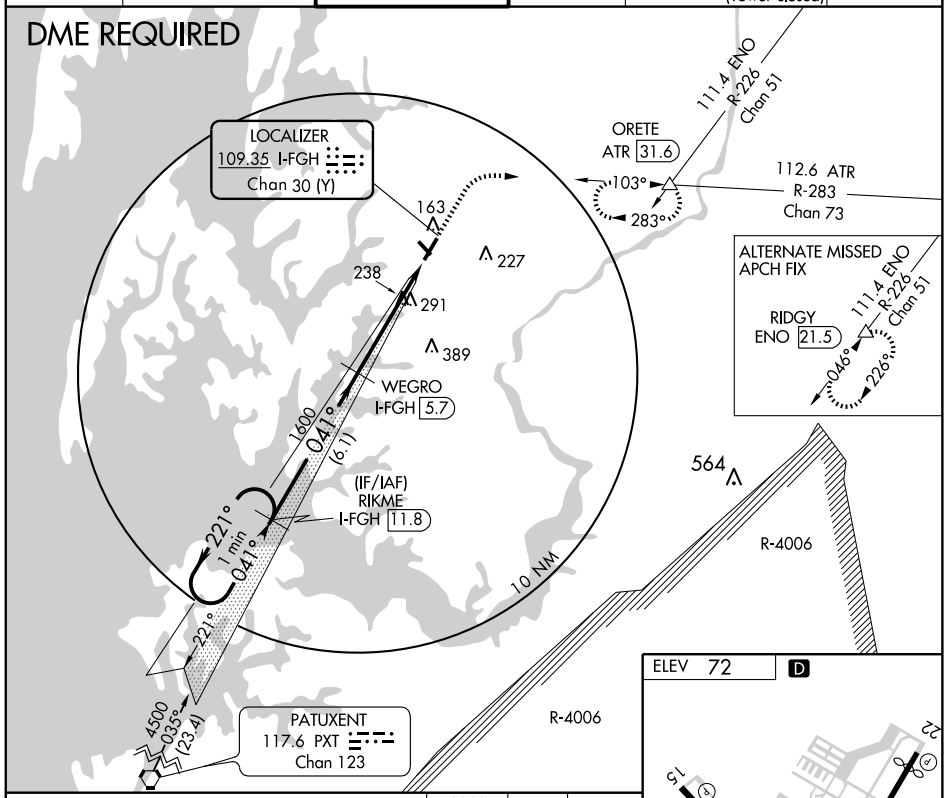
ILS or LOC/DME RWY 4

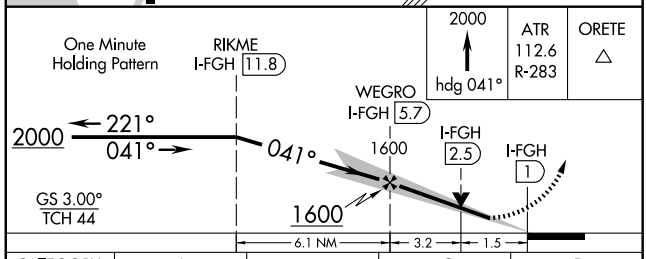
EASTON/NEWNAM FIELD (ESN)

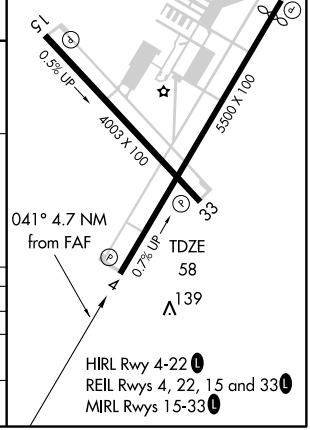
T If local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase DA to 358 feet and all MDAs 100 feet.
A VDP NA when using Baltimore-Washington Intl Thurgood Marshall altimeter setting.

MISSED APPROACH: Climb to 2000 via heading 041° and ATR VOR/DME R-283 to ORETE INT/ATR 31.6 DME and hold.

ATIS	POTOMAC APP CON	EASTON TOWER ★	GND CON	CLNC DEL	UNICOM
124.475	124.55 317.425	118.525 (CTAF) L	119.075	119.075 126.9 (Tower closed)	122.95







CATEGORY	A	B	C	D
S-ILS 4	265-¾ 207 (200-¾)			
S-LOC 4	540-1 482 (500-1)		540-1¼ 482 (500-1¼)	540-1½ 482 (500-1½)
CIRCLING	540-1 468 (500-1)		660-1½ 588 (600-1½)	660-2 588 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	4775
CH 86905	040°	TDZE	58
W04A		Apt Elev	72

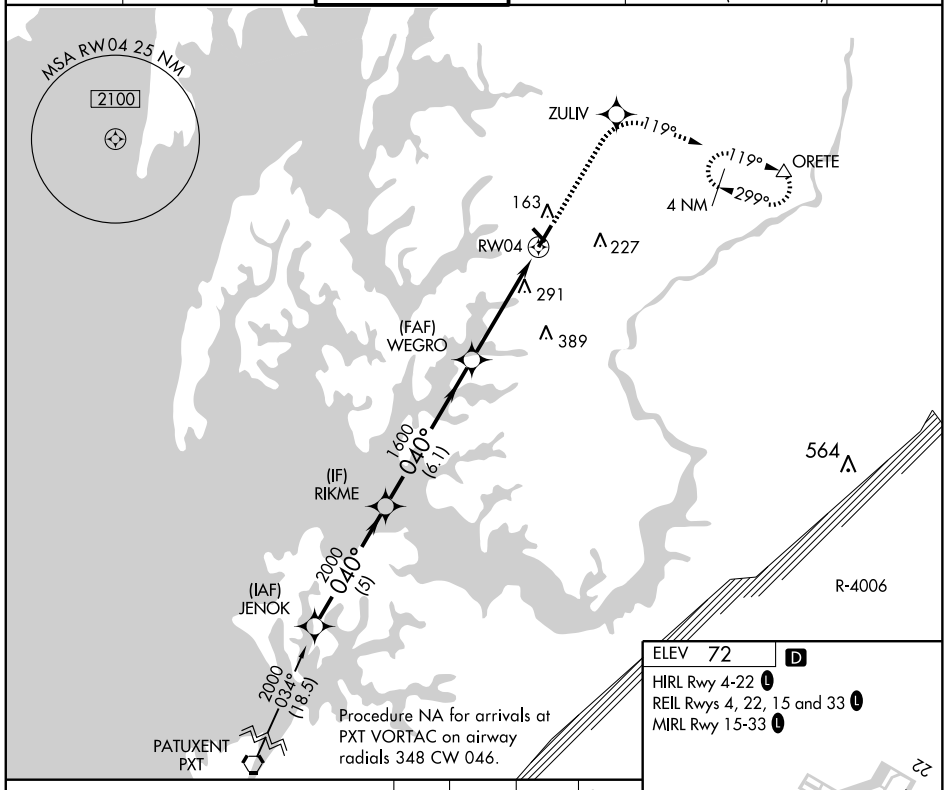
RNAV (GPS) RWY 4

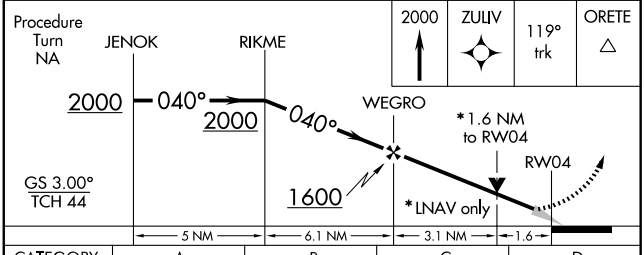
EASTON/NEWNAM FIELD (ESN)

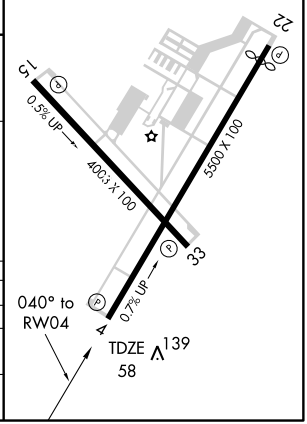
DME/DME RNP-0.3 NA. If local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase DA to 358 feet and all MDAs 100 feet. VDP NA when using Baltimore Washington Intl Thurgood Marshall altimeter setting.

MISSED APPROACH: Climb to 2000 direct ZULIV and via 119° track to ORETE and hold.

ATIS	POTOMAC APP CON	EASTON TOWER ★	GND CON	CLNC DEL	UNICOM
124.475	124.55 317.425	118.525 (CTAF) L	119.075	119.075 126.9 (Tower closed)	122.95







CATEGORY	A	B	C	D
LPV DA		265-¾	207 (200-¾)	
LNAV MDA	600-1 542 (600-1)		600-1½ 542 (600-1½)	600-1¾ 542 (600-1¾)
CIRCLING	600-1 528 (600-1)		660-1½ 588 (600-1½)	660-2 588 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	4003
148°	TDZE	47
	Apt Elev	72

RNAV (GPS) RWY 15
EASTON/NEWNAM FIELD (ESN)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all MDAs 100 feet, LNAV Cats C and D visibility ¼ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 2000 direct TUKIE and via 052° track to ORETE and hold.

ATIS	POTOMAC APP CON	EASTON TOWER ★	GND CON	CLNC DEL	UNICOM
124.475	124.55 317.425	118.525 (CTAF) L	119.075	119.075 126.9 (Tower closed)	122.95

RADAR REQUIRED

654

(IF) HIVAR

1600 147° (6.1)

(FAF) CERAV

148°

163± 163

RW15

227

119° ORETE

299° 4 NM

291 389

052°

TUKIE

R-4006

MSA RW15 25 NM

2100

VGSI and descent angles not coincident.

2000	TUKIE	052° trk	ORETE

HIVAR 2000 147° CERAV 1600 3.04° TCH 45 148° RW15

6.1 NM 4.7 NM

CATEGORY	A	B	C	D
LNAV MDA	420-1 373 (400-1)			420-1¼ 373 (400-1¼)
CIRCLING	480-1 408 (500-1)	540-1 468 (500-1)	660-1½ 588 (600-1½)	660-2 588 (600-2)

ELEV 72 D

148° to RW15

TDZE 47

0.5% UP

4003 X 100

5500 X 100

0.7% UP

139

HIRL Rwy 4-22 L
REIL Rwys 4, 22, 15 and 33 L
MIRL Rwys 15-33 L

NE-3. 17 DEC 2009 to 14 JAN 2010

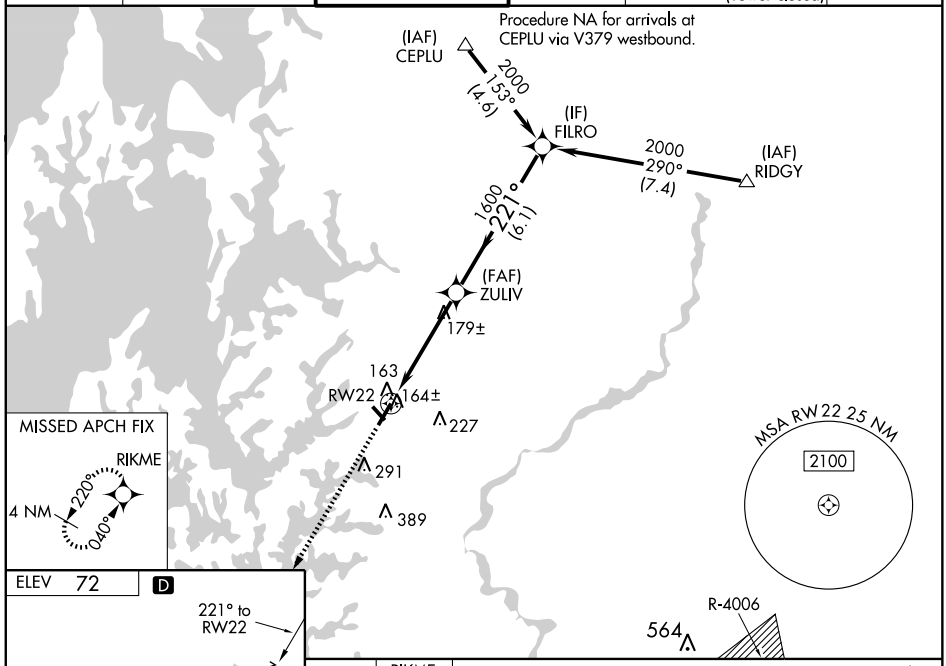
WAAS CH 40207 W22A	APP CRS 221°	Rwy Idg 5175 TDZE 72 Apt Elev 72

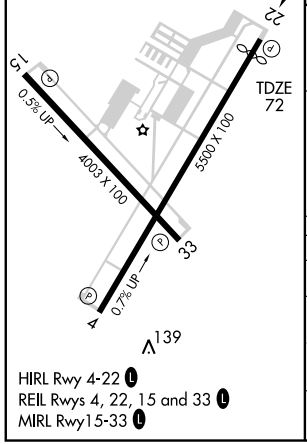
RNAV (GPS) RWY 22
EASTON/NEWNAM FIELD (ESN)

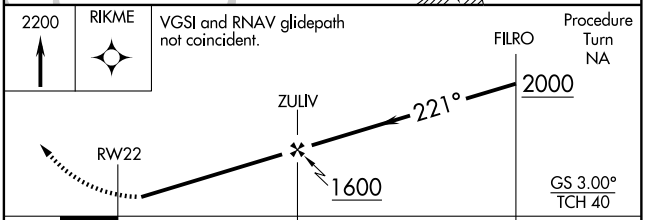
Baro-VNAV NA when using Baltimore-Washington Intl Thurgood Marshall altimeter setting. When local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all DA 93 feet, all MDA 100 feet, LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV Cats C and D visibility ¼ mile and Circling Cats C visibility ½ mile and Cat D visibility ¼ mile. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 direct RIKME and hold.

ATIS	POTOMAC APP CON	EASTON TOWER ★	GND CON	CLNC DEL	UNICOM
124.475	124.55 317.425	118.525 (CTAF) L	119.075	119.075 126.9 (Tower closed)	122.95







CATEGORY	A	B	C	D
LPV DA	352-1 280 (300-1)			
LNAV/VNAV DA	434-1¼ 362 (400-1¼)			
LNAV MDA	440-1 368 (400-1)			440-1¼ 368 (400-1¼)
CIRCLING	480-1 408 (500-1)	540-1 468 (500-1)	660-1½ 588 (600-1½)	660-2 588 (600-2)

HIRL Rwy 4-22 L
REIL Rwys 4, 22, 15 and 33 L
MIRL Rwy15-33 L

NE-3, 17 DEC 2009 to 14 JAN 2010

EASTON, MARYLAND AL-5596 (FAA)

APP CRS	Rwy Idg	4003
328°	TDZE	51
	Apt Elev	72

RNAV (GPS) RWY 33

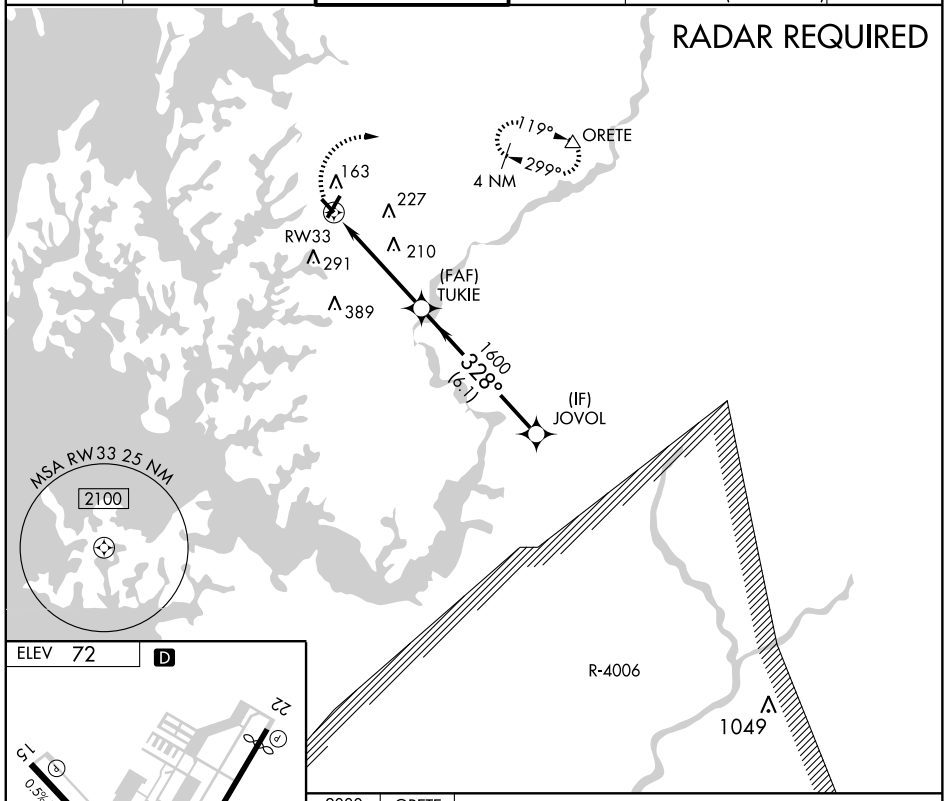
EASTON/NEWNAM FIELD (ESN)

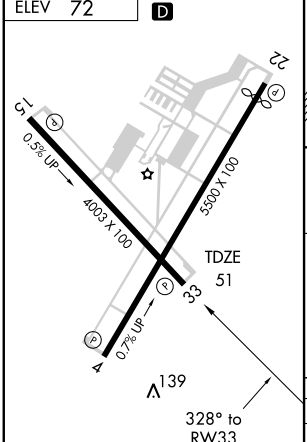
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Baltimore-Washington Intl Thurgood Marshall altimeter setting and increase all MDA 100 feet, LNAV Cat C and D visibility ¼ mile, Circling Cat C visibility ½ mile and Cat D visibility ¼ mile.

MISSED APPROACH: Climbing right turn to 2000 direct ORETE and hold.

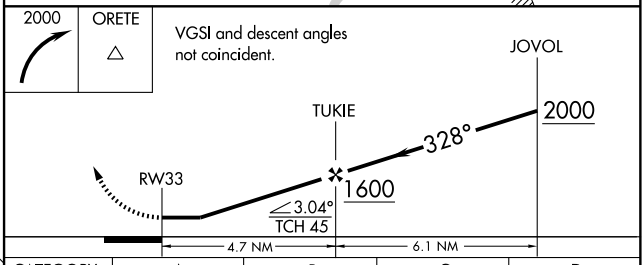
ATIS	POTOMAC APP CON	EASTON TOWER ★	GND CON	CLNC DEL	UNICOM
124.475	124.55 317.425	118.525 (CTAF) L	119.075	119.075 126.9 (Tower closed)	122.95

RADAR REQUIRED





HIRL Rwy 4-22 L
REIL Rwys 4, 22, 15 and 33 L
MIRL Rwy 15-33 L



CATEGORY	A	B	C	D
LNAV MDA	520-1 469 (500-1)		520-1¼ 469 (500-1¼)	520-1½ 469 (500-1½)
CIRCLING	520-1 448 (500-1)	540-1 468 (500-1)	660-1½ 588 (600-1½)	660-2 588 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

ELKTON, MARYLAND AL-9807 (FAA)

APP CRS	Rwy Idg	2699
127°	TDZE	106
	Apt Elev	106

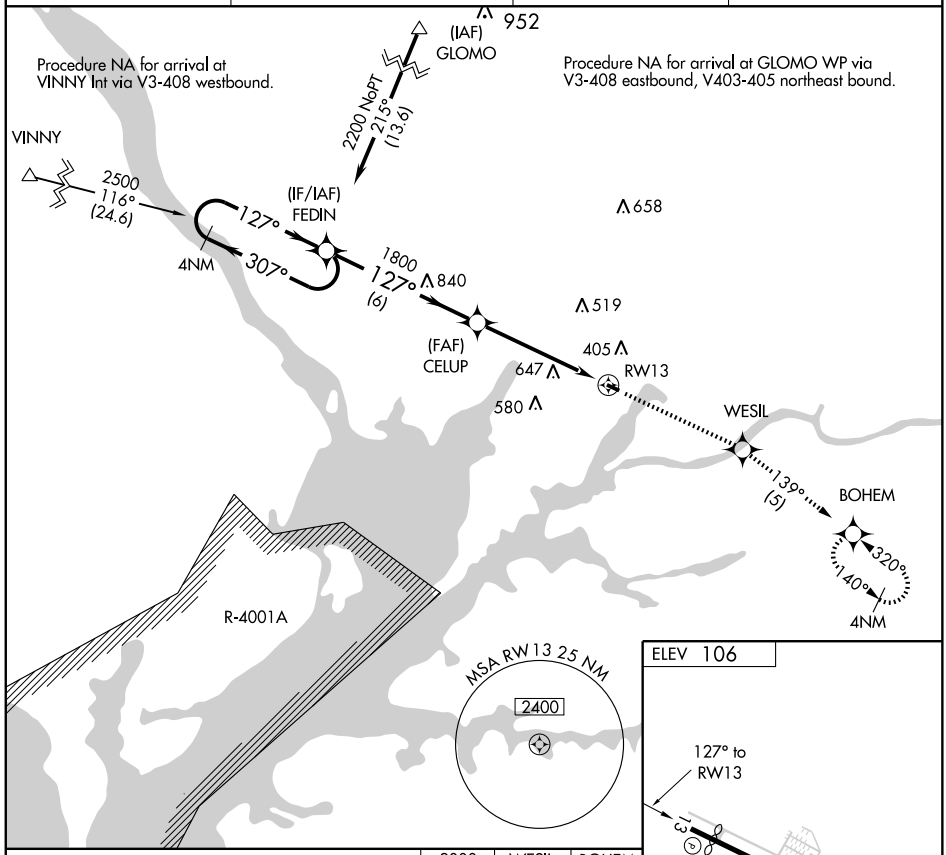
RNAV (GPS) RWY 13

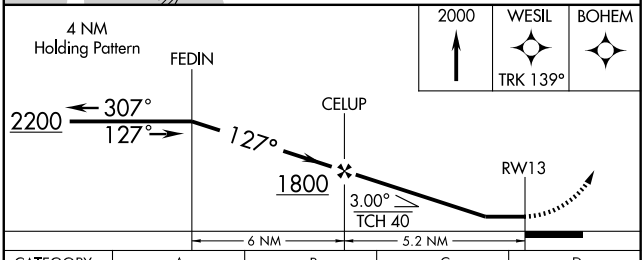
ELKTON/CECIL COUNTY (58M)

T Use Summit, Middletown, DE altimeter setting; if not received, use New Castle County, Wilmington, DE altimeter setting and increase all MDAs 20 feet.
A NA GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure NA at night.

MISSED APPROACH: Climb to 2000 direct WESIL WP and via 139° track to BOHEM WP and hold.

SUMMIT AWOS-3	PHILADELPHIA APP CON	UNICOM	123.0 L
132.325	118.35 323.1	122.8 (CTAF)	





CATEGORY	A	B	C	D
LNAV MDA	980-1¼	874 (900-1¼)	NA	
CIRCLING	980-1¼	874 (900-1¼)	NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	2385
308°	TDZE	106
	Apt Elev	106

RNAV (GPS) RWY 31

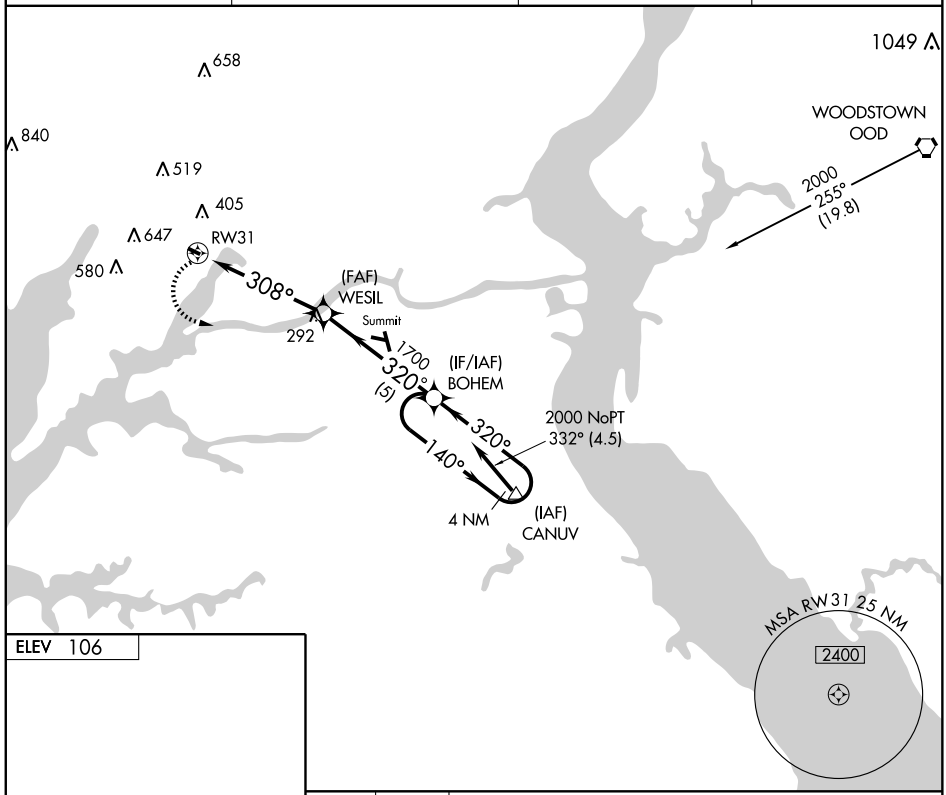
ELKTON/ CECIL COUNTY (58M)

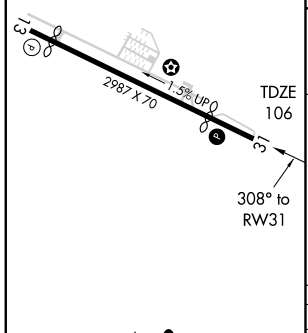
GPS or RNP -0.3 required. DME/DME RNP -0.3 NA.
Use Summit, Middletown, DE altimeter setting; if not received, use New Castle, Wilmington, DE altimeter setting and raise all MDAs 20 feet.
Circling NA at night.

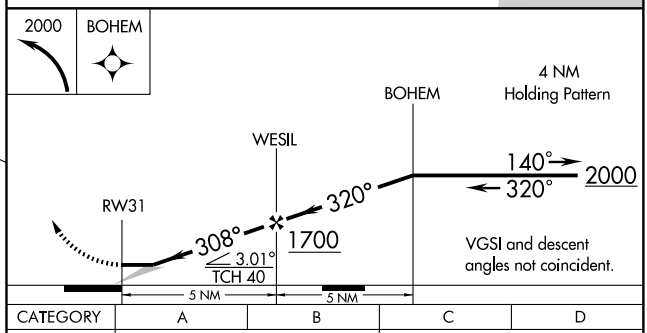
NA

MISSED APPROACH: Climbing left turn to 2000 direct BOHEM WP and hold.

SUMMIT AWOS-3	PHILADELPHIA APP CON	UNICOM	
132.325	118.35 323.1	122.8 (CTAF)	123.0 L







CATEGORY	A	B	C	D
LNAV MDA	600-1 494 (500-1)		NA	
CIRCLING	820-1 714 (800-1)		NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC ENO	APP CRS	Rwy Idg	2385
111.4	331°	TDZE	106
Chan 51		Apt Elev	106

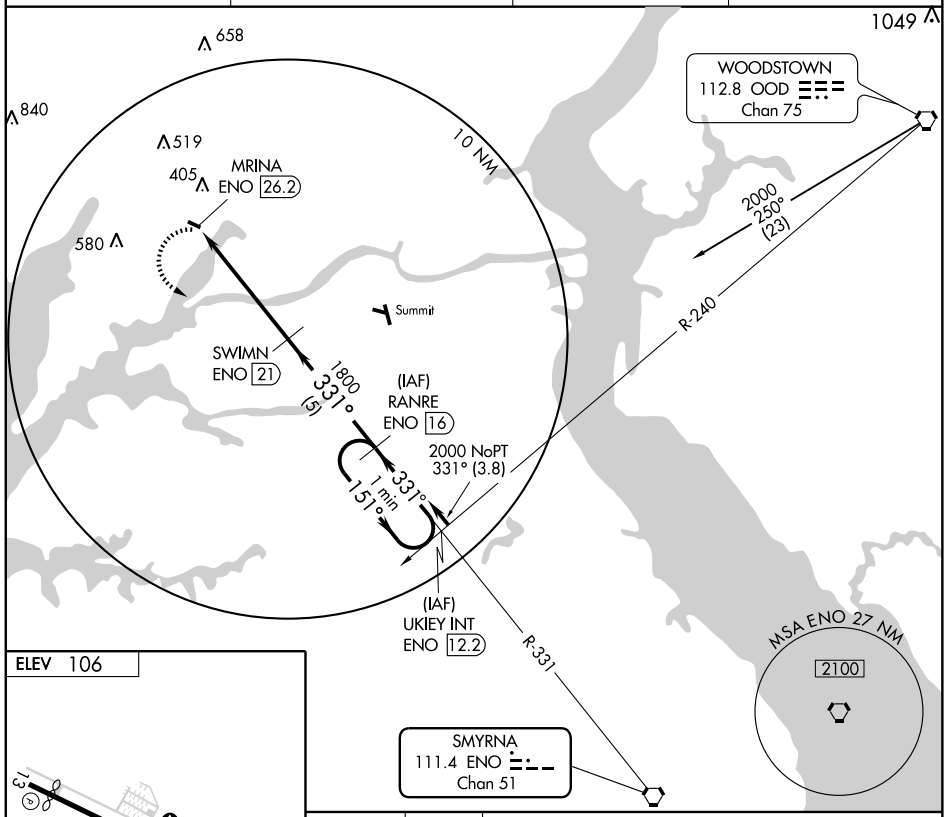
VOR/DME RWY 31

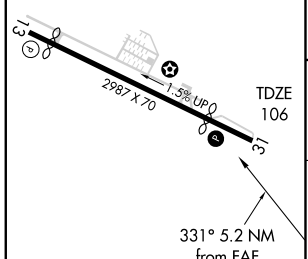
ELKTON/ CECIL COUNTY (58M)

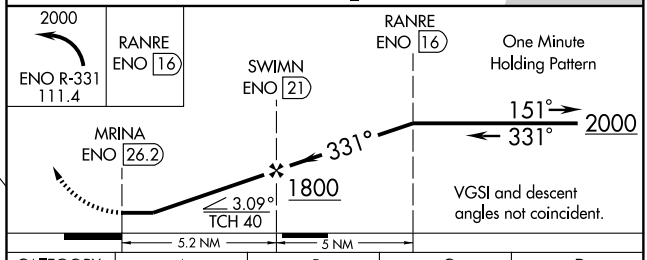
Use Summit, Middletown, DE altimeter setting; if not received, use New Castle, Wilmington, DE altimeter setting and raise all MDAs 20 feet. Circling NA at night.

MISSED APPROACH: Climbing left turn to 2000 via ENO R-331 to RANRE/ENO VORTAC 16 DME and hold.

SUMMIT AWOS-3	PHILADELPHIA APP CON	UNICOM	123.0 L
132.325	118.35 323.1	122.8 (CTAF)	







CATEGORY	A	B	C	D
S-31	720-1 614 (700-1)	720-1¼ 614 (700-1¼)	NA	
CIRCLING	820-1 714 (800-1)	820-1¼ 714 (800-1¼)	NA	

REIL Rwys 13 and 31 L
MIRL Rwy 13-31 L

NE-3. 17 DEC 2009 to 14 JAN 2010

NDB BUH 260	APP CRS 121°	Rwy Idg 3000 TDZE 150 Apt Elev 150

NDB RWY 10

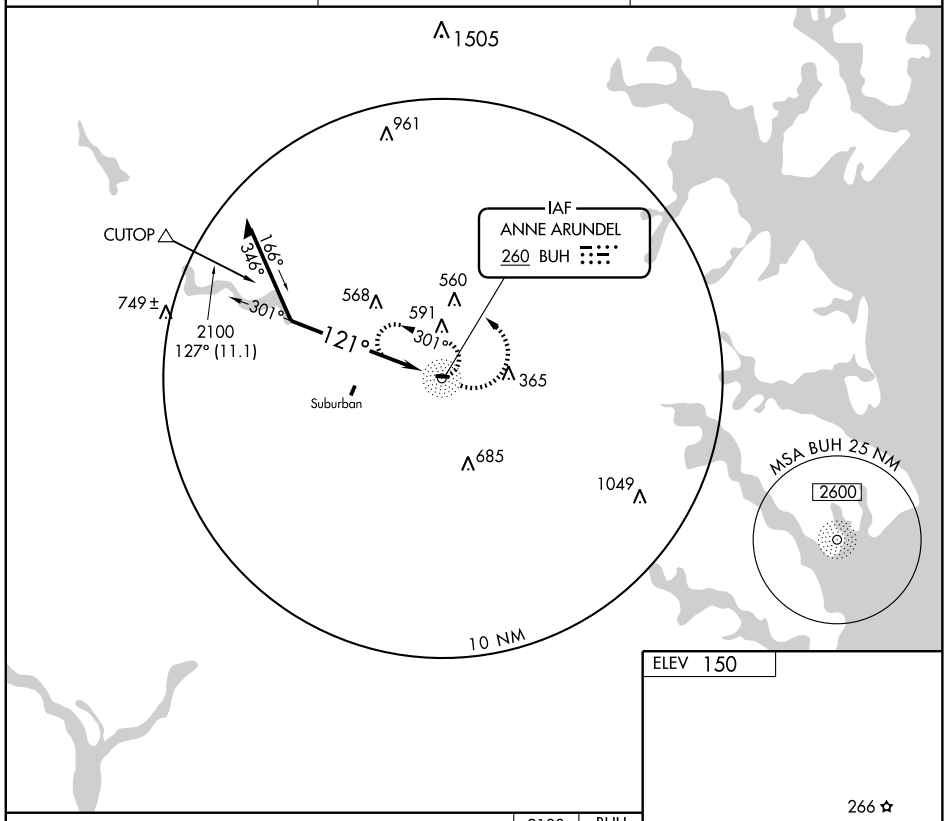
FORT MEADE(ODENTON)/ TIPTON (FME)

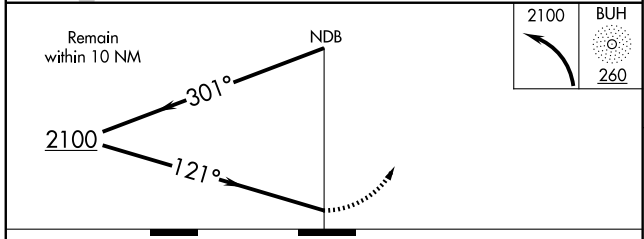
Use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

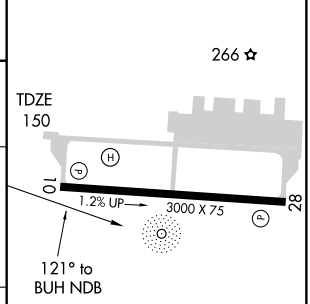
NA

MISSED APPROACH: Climbing left turn to 2100 in BUH NDB holding pattern.

AWOS-3	POTOMAC APP CON	UNICOM
123.925	119.7 290.475	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-10	1120-1¼ 970 (1000-1¼)	1120-1½ 970 (1000-1½)	NA	
CIRCLING	1120-1¼ 970 (1000-1¼)	1120-1½ 970 (1000-1½)	NA	

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

NE-3. 17 DEC 2009 to 14 JAN 2010

FORT MEADE(ODENTON), MARYLAND AL-5225 (FAA)

APP CRS	Rwy Idg	3000
114°	TDZE	150
	Apt Elev	150

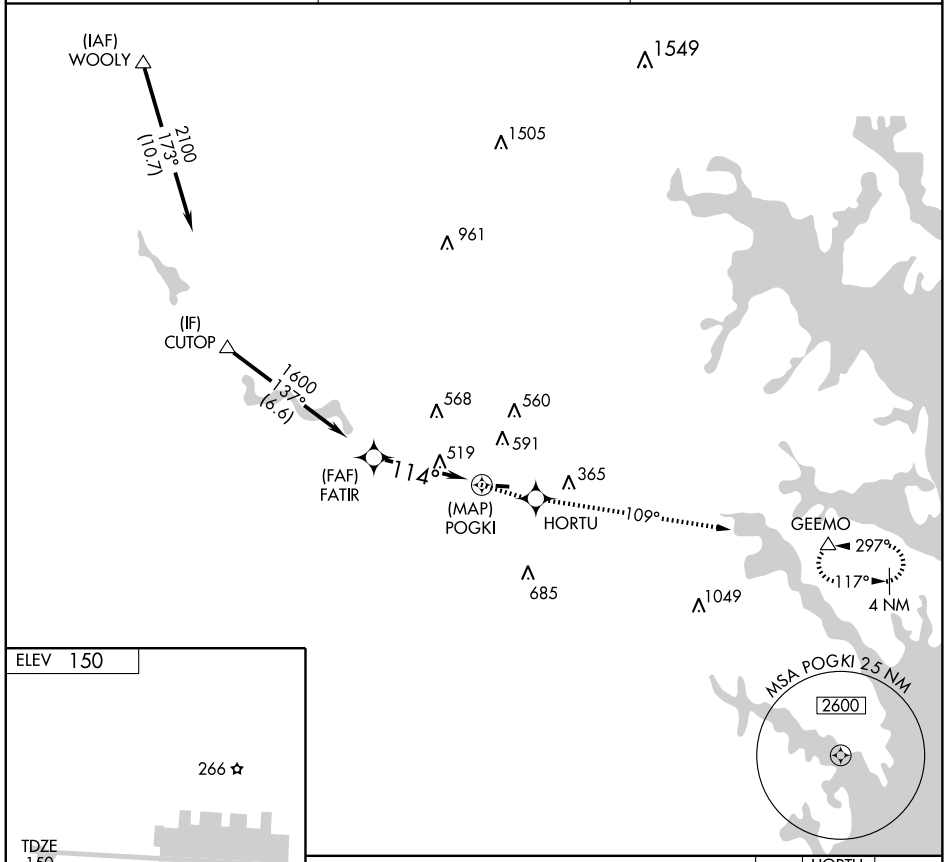
RNAV (GPS) RWY 10

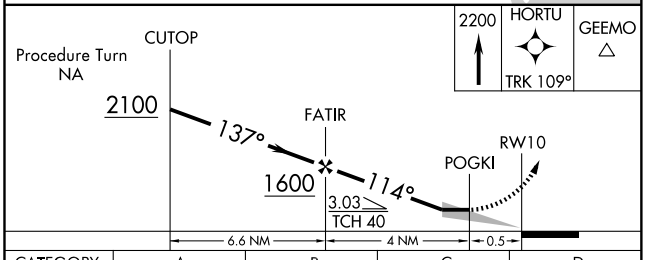
FORT MEADE(ODENTON)/ TIPTON (FME)

DME/DME RNP-0.3 NA.
Use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

MISSED APPROACH: Climb to 2200 direct HORTU and via 109° track to GEEMO and hold.

AWOS-3	POTOMAC APP CON	UNICOM
123.925	119.7 290.475	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	800-1 650 (700-1)		NA	
CIRCLING	840-1 690 (700-1)		NA	

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	3000
284°	TDZE	150
	Apt Elev	150

RNAV (GPS) RWY 28

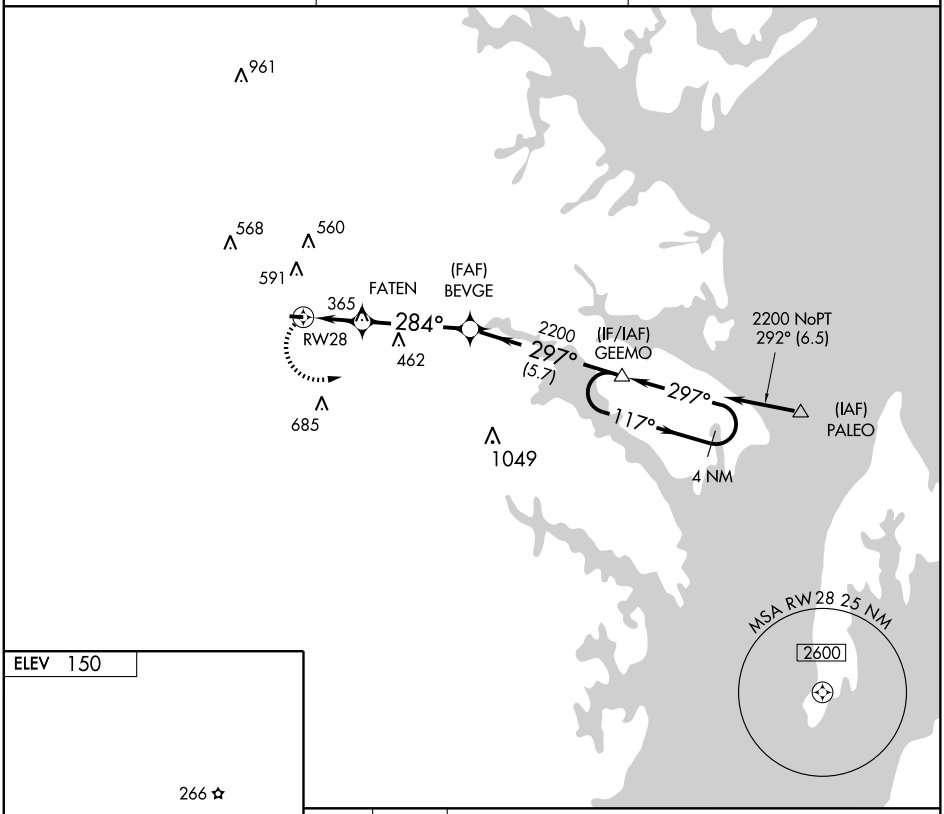
FORT MEADE (ODENTON)/ TIPTON (FME)

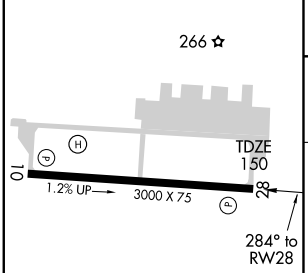
DME/DME RNP-0.3 NA.
Use Baltimore/Washington Intl Thurgood Marshall altimeter setting.

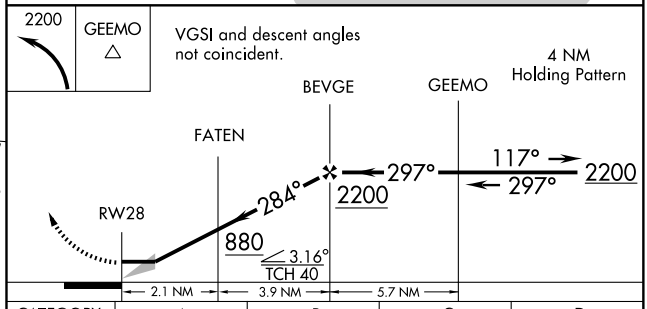
NA

MISSED APPROACH: Climbing left turn to 2200 direct GEEMO WP and hold.

AWOS-3	POTOMAC APP CON	UNICOM
123.925	119.7 290.475	123.05 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	760-1	610 (700-1)	NA	
CIRCLING	840-1	690 (700-1)	NA	

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

NE-3. 17 DEC 2009 to 14 JAN 2010

FORT MEADE(ODENTON), MARYLAND AL-5225 (FAA)

VORTAC BAL	APP CRS	Rwy Idg	3000
115.1	233°	TDZE	N/A
Chan 98		Apt Elev	150

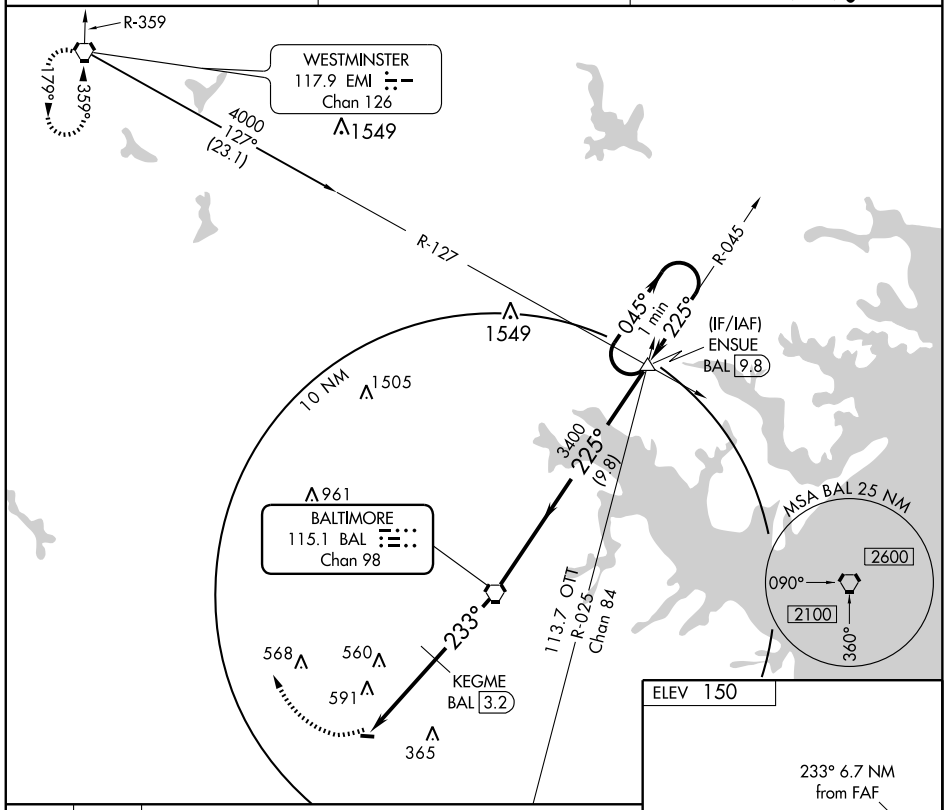
VOR-A

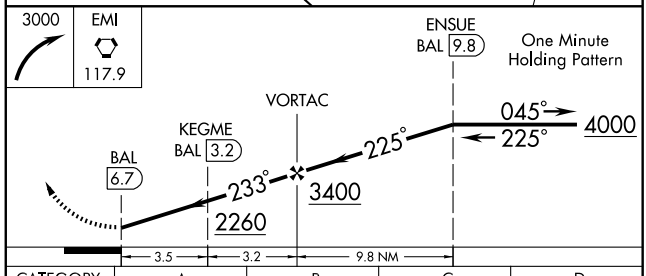
FORT MEADE(ODENTON)/ TIPTON (FME)

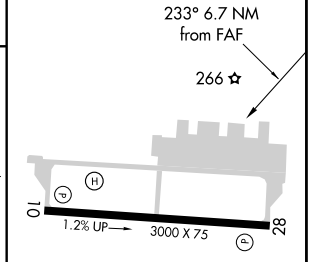
Use Baltimore/Washington Intl Thurgood Marshall altimeter setting. NA

MISSED APPROACH: Climbing right turn to 3000 direct EMI VORTAC and hold.

AWOS-3	POTOMAC APP CON	UNICOM
123.925	119.7 290.475	123.05 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	2260-1¼ 2110 (2200-1¼)	2260-1½ 2110 (2200-1½)	NA	

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

KEGME FIX MINIMUMS

FAF to MAP 6.7 NM

CIRCLING	920-1 770 (800-1)	920-1¼ 770 (800-1¼)	NA

Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

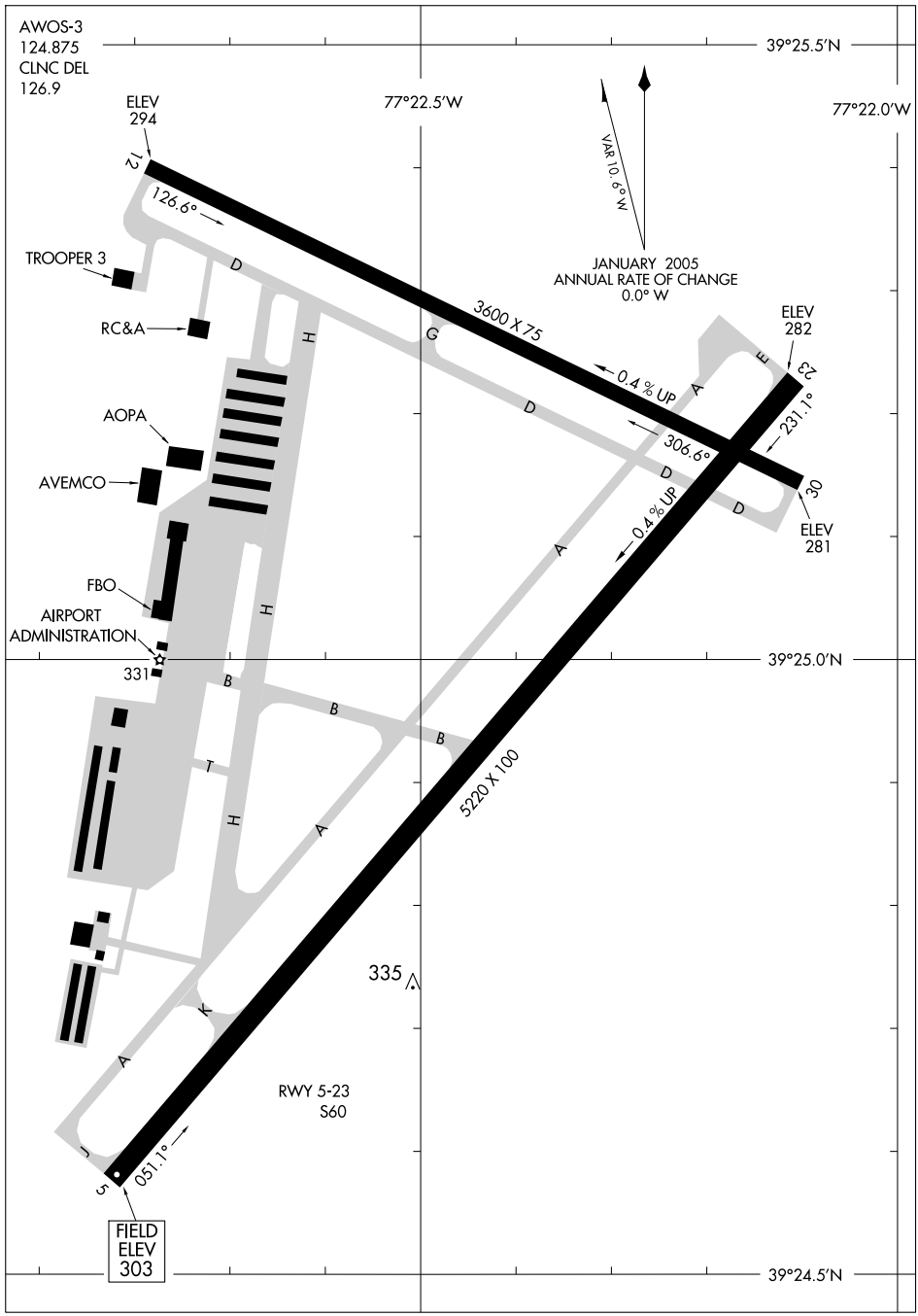
NE-3. 17 DEC 2009 to 14 JAN 2010

09351

AIRPORT DIAGRAM

AL-5089 (FAA)

FREDERICK MUNI (FDK)
FREDERICK, MARYLAND



NE-3, 17 DEC 2009 to 14 JAN 2010

FREDERICK, MARYLAND

AL-5089 (FAA)

ILS or LOC RWY 23

FREDERICK MUNI (FDK)

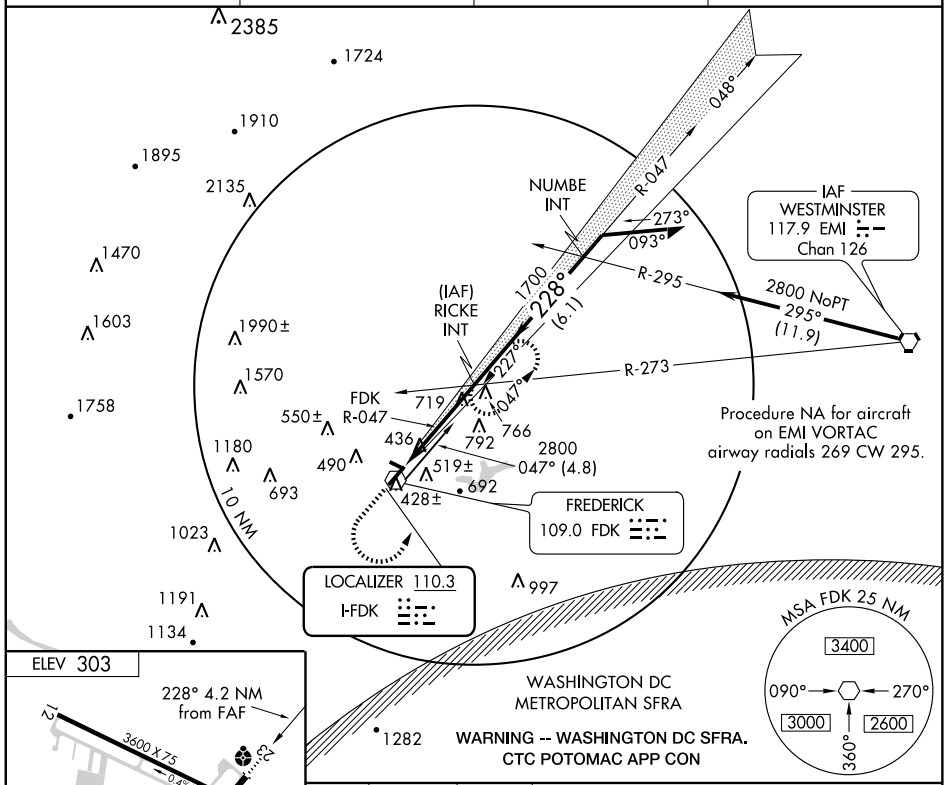
LOC I-FDK	APP CRS	Rwy Idg	5220
110.3	228°	TDZE	296
		Apt Elev	303

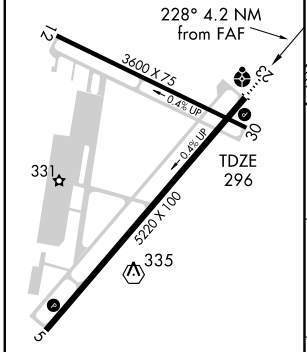
NA Inoperative table does not apply to S-LOC Cat C. When VGSI inop, Circling Rwy 5 and Rwy 30 NA at night.

ODALS

MISSED APPROACH: Climb to 1300, then climbing left turn to 2800 via FDK R-047 to RICKE INT and hold.

AWOS-3	POTOMAC APP CON		CLNC DEL	UNICOM
124.875	125.525	291.625	126.9	122.725 (CTAF) L



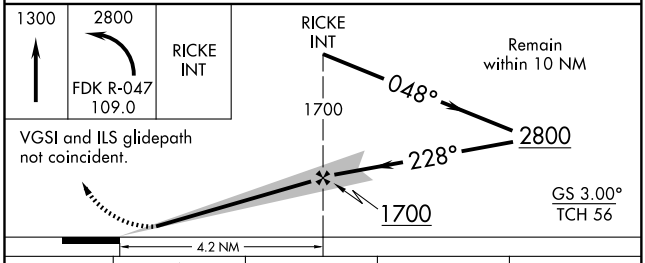


REIL Rwys 5, 12, 23 and 30 L

HIRL Rwy 5-23 L

MIRL Rwy 12-30 L

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24



CATEGORY	A	B	C	D
S-ILS 23	684-1½	388 (400-1½)		
S-LOC 23	1020-¾	724 (800-¾)	1020-2 724 (800-2)	1020-2¼ 724 (800-2¼)
CIRCLING	1020-1½	717 (800-1½)	1020-2 717 (800-2)	1080-2½ 777 (800-2½)

NE-3. 17 DEC 2009 to 14 JAN 2010

FREDERICK, MARYLAND

AL-5089 (FAA)

RNAV (GPS) RWY 5

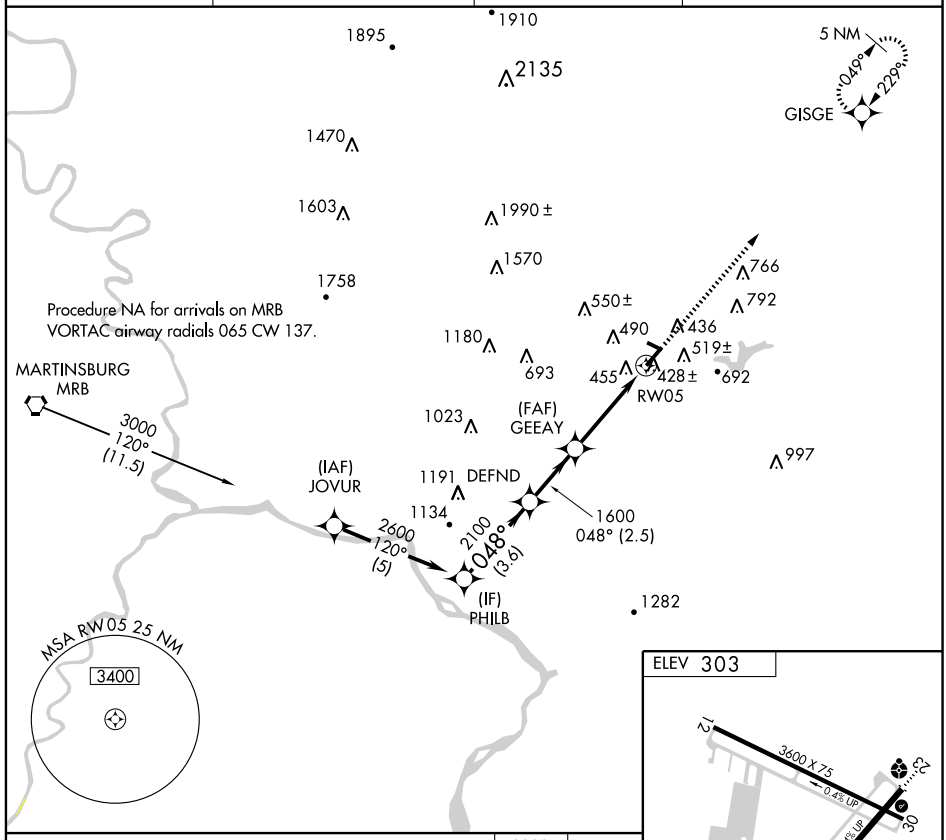
FREDERICK MUNI (FDK)

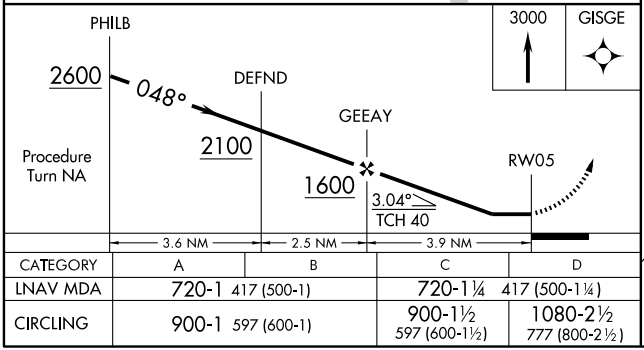
APP CRS	Rwy Idg	5220
048°	TDZE	303
	Apt Elev	303

DME/DME RNP -0.3 NA. If local altimeter setting not received, use Leesburg altimeter setting and increase all MDAs 80 feet.

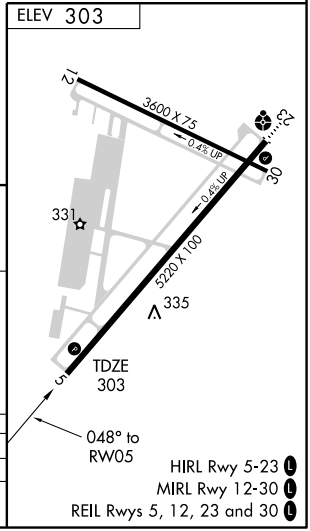
MISSED APPROACH: Climb to 3000 direct GISGE and hold.

AWOS-3	POTOMAC APP CON		CLNC DEL	UNICOM
124.875	125.525	291.625	126.9	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	720-1 417 (500-1)		720-1¼ 417 (500-1¼)	
CIRCLING	900-1 597 (600-1)		900-1½ 597 (600-1½)	1080-2½ 777 (800-2½)



HIRL Rwy 5-23 L
MIRL Rwy 12-30 L
REIL Rwys 5, 12, 23 and 30 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS		
229°	Rwy Idg	5220
	TDZE	296
	Apt Elev	303

RNAV (GPS) Y RWY 23

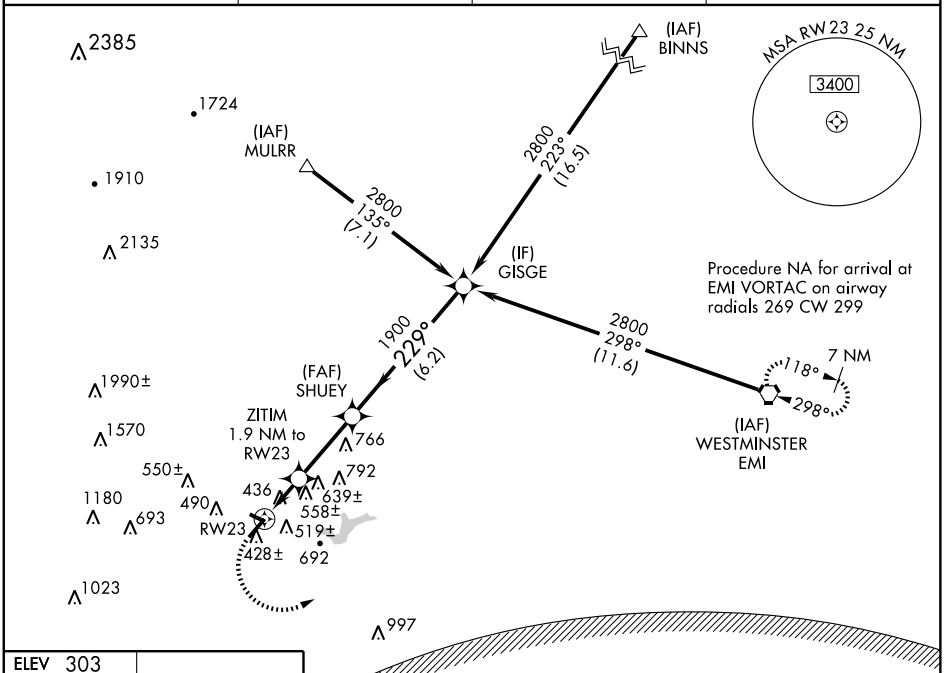
FREDERICK MUNI (FDK)

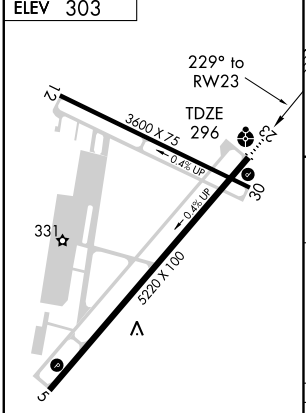
DME/DME RNP-0.3 NA.
Inoperative table does not apply to Cat C.
When VGSI inop, circling to Rwy 5 and Rwy 30 NA at night.

ODALS

MISSED APPROACH: Climbing left turn to 3000 direct EMI VORTAC and hold.

AWOS-3	POTOMAC APP CON		CLNC DEL	UNICOM
124.875	125.525	291.625	126.9	122.725 (CTAF) L

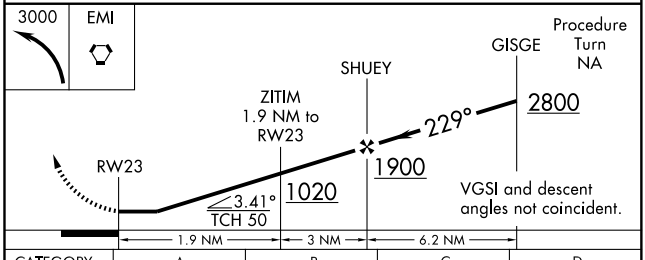




REIL Rwys 5, 12, 23 and 30 L
HIRL Rwy 5-23 L
MIRL Rwy 12-30 L

WASHINGTON DC
METROPOLITAN SFRA

WARNING -- WASHINGTON DC SFRA.
CTC POTOMAC APP CON



CATEGORY	A	B	C	D
LNAV MDA	820-¾ 524 (600-¾)		820-1½ 524 (600-1½)	820-1¾ 524 (600-1¾)
CIRCLING	900-1 597 (600-1)		900-1½ 597 (600-1½)	1080-2½ 777 (800-2½)

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	5220
CH 81802	229°	TDZE	296
W23A		Apt Elev	303

RNAV (GPS) Z RWY 23

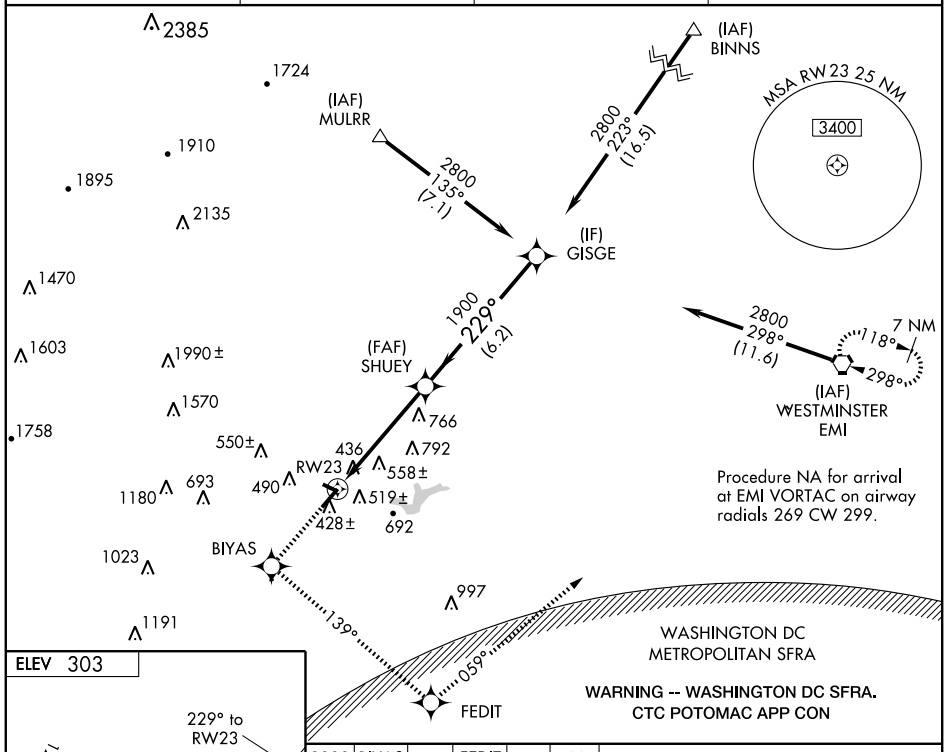
FREDERICK MUNI (FDK)

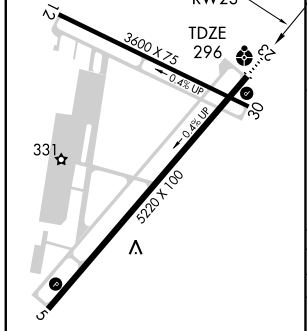
DME/DME RNP-0.3 NA. Baro-VNAV NA below -15°C (5°F). When VGSI inop, Circling Rwy 5 and Rwy 30 NA at night. Inoperative table does not apply to LPV, LNAV/VNAV all Cats, and LNAV Cat C.

ODALS

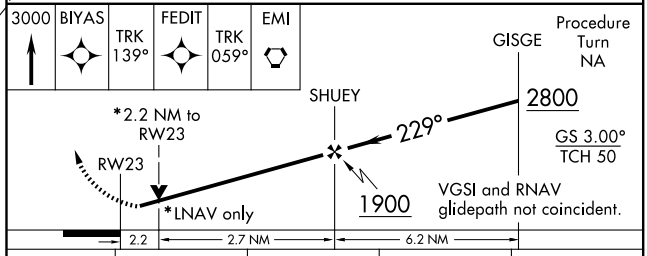
MISSED APPROACH: Climb to 3000 direct BIYAS WP and via 139° track to FEDIT WP and via 059° track to EMI VORTAC and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.875	125.525 291.625	126.9	122.725 (CTAF) L





REIL Rwys 5, 12, 23 and 30 L
HIRL Rwy 5-23 L
MIRL Rwy 12-30 L



CATEGORY	A	B	C	D
LPV DA	690-1½ 394 (400-1½)			
LNAV/VNAV DA	1020-2½ 724 (800-2½)			
LNAV MDA	1020-¾ 724 (800-¾)		1020-2 724 (800-2)	1020-2¼ 724 (800-2¼)
CIRCLING	1020-2½ 717 (800-2½)			1080-2½ 777 (800-2½)

NE-3. 17 DEC 2009 to 14 JAN 2010

VOR FDK 109.0	APP CRS 220°	Rwy Idg N/A TDZE N/A Apt Elev 303

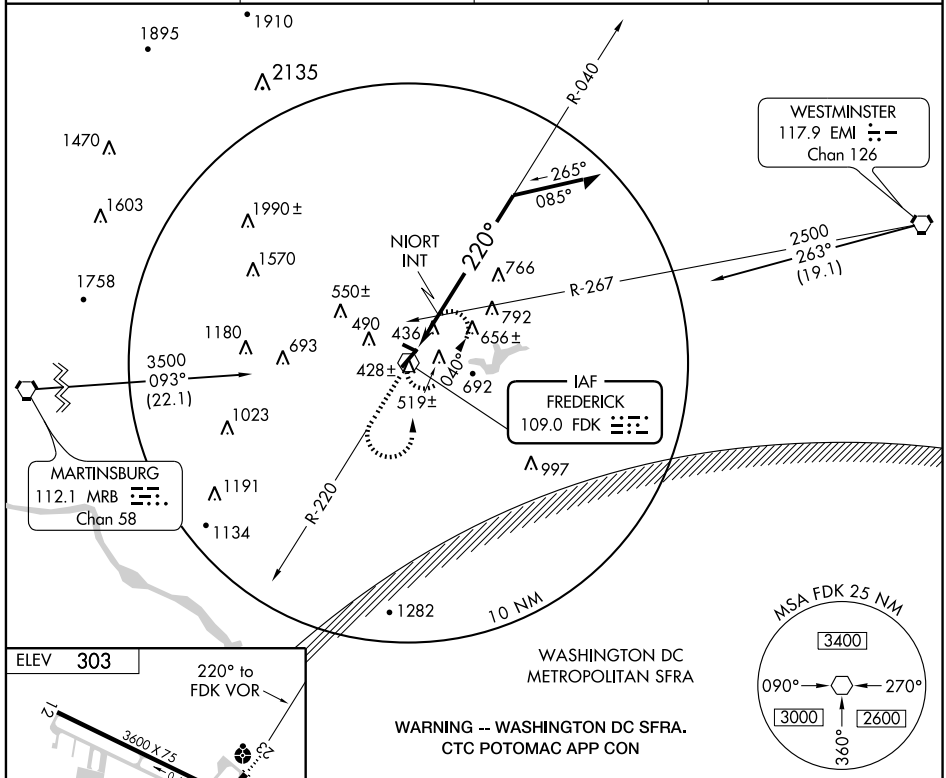
VOR-A

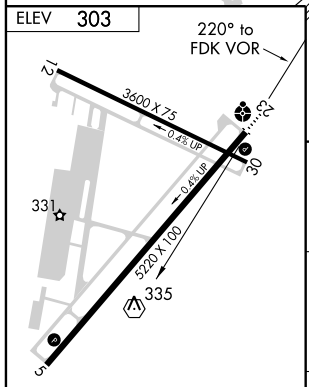
FREDERICK MUNI (FDK)

NA

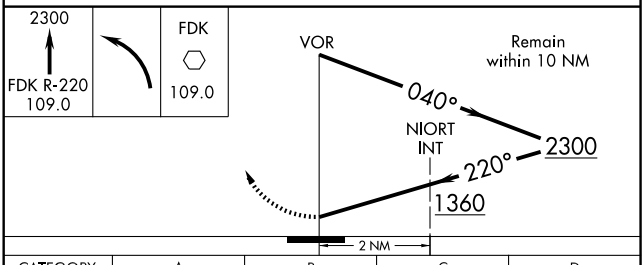
MISSED APPROACH: Climb to 2300 via FDK R-220 then left turn direct FDK VOR and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
124.875	125.525 291.625	126.9	122.725 (CTAF) L





REIL Rwys 5, 12, 23 and 30 L
HIRL Rwy 5-23 L
MIRL Rwy 12-30 L

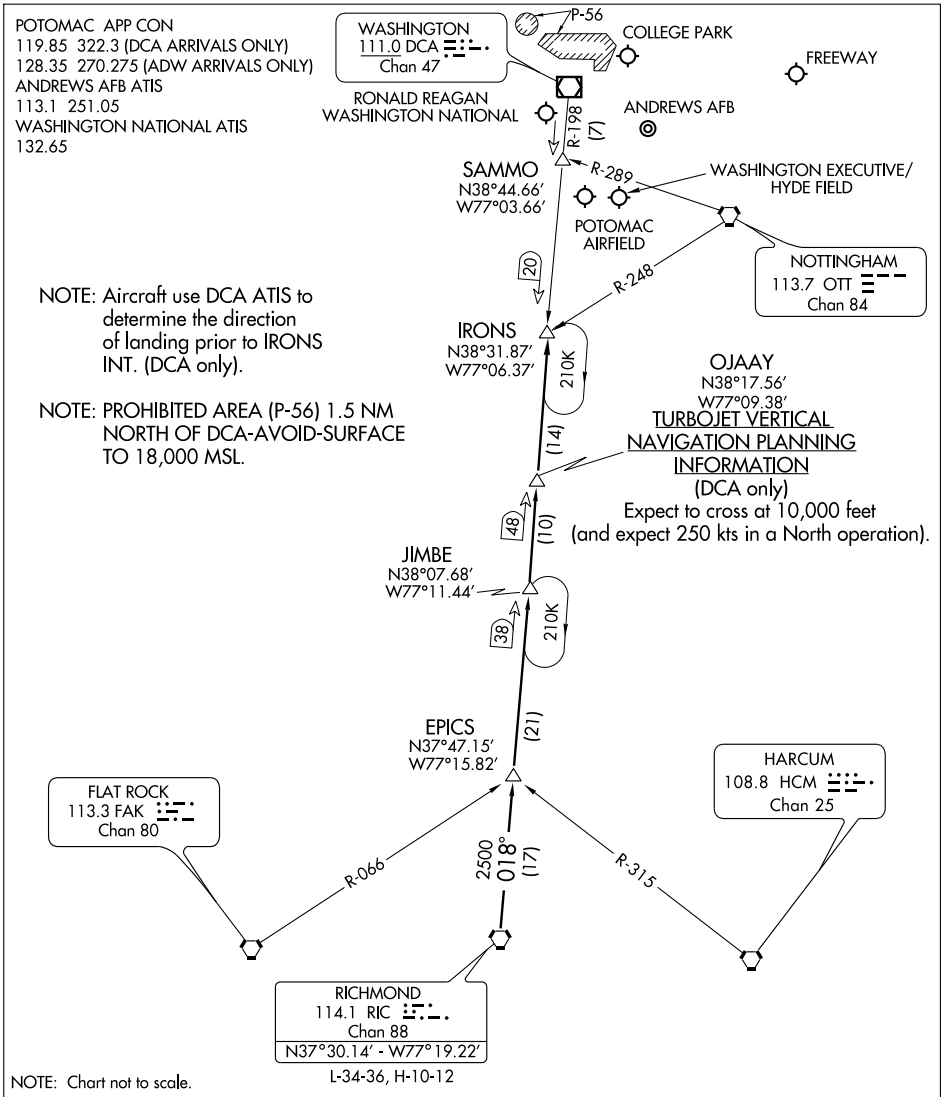


CATEGORY	A	B	C	D
CIRCLING	1360-1¼ 1057 (1100-1¼)	1360-1½ 1057 (1100-1½)	1360-3 1057 (1100-3)	
NIORT INT MINIMUMS				
CIRCLING	920-1 617 (700-1)		920-1¾ 617 (700-1¾)	1080-2½ 777 (800-2½)

NE-3, 17 DEC 2009 to 14 JAN 2010

IRONS FOUR ARRIVAL

WASHINGTON, DC



RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence. . . .

. . . .From over IRONS INT:
Ronald Reagan Washington National Airport (DCA only):
LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to the final approach course.
LANDING NORTH: Expect vectors to final approach course.
All other airports: Expect vectors.

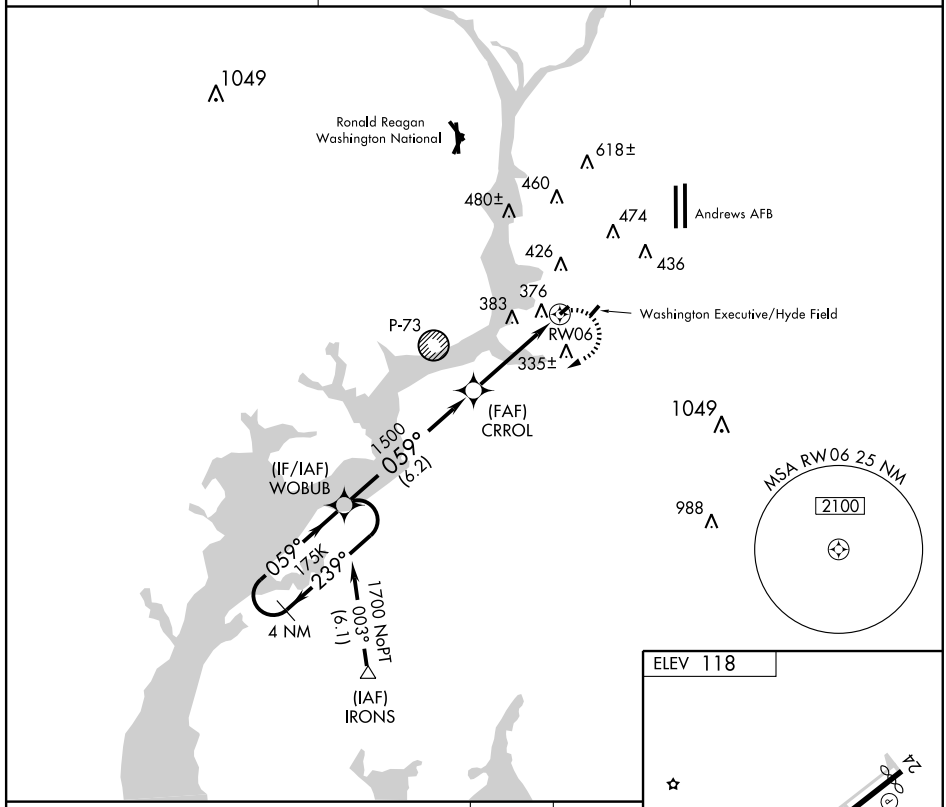
APP CRS	Rwy Idg	2289
059°	TDZE	118
	Apt Elev	118

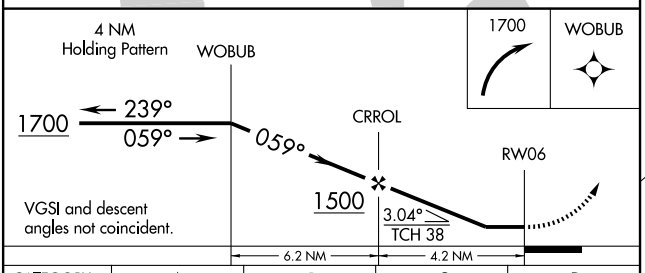
RNAV (GPS) RWY 6

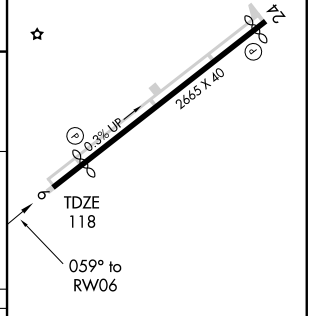
FRIENDLY / POTOMAC AIRFIELD (VKX)

NA	Circling NA SE of Rwys 6 and 24. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. If local altimeter setting not received, use Andrews AFB altimeter setting and increase all MDAs 40 feet.	MISSED APPROACH: Climbing right turn to 1700 direct WOBUB and hold.

AWOS-A	POTOMAC APP CON	UNICOM
122.8	125.650 348.725	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	680-1 562 (600-1)	NA		
CIRCLING	740-1 622 (700-1)	NA		

REIL Rwy 6-24 L

NE-3. 17 DEC 2009 to 14 JAN 2010

NDB GAI	APP CRS	Rwy Idg	4202
385	134°	TDZE	520
		Apt Elev	539

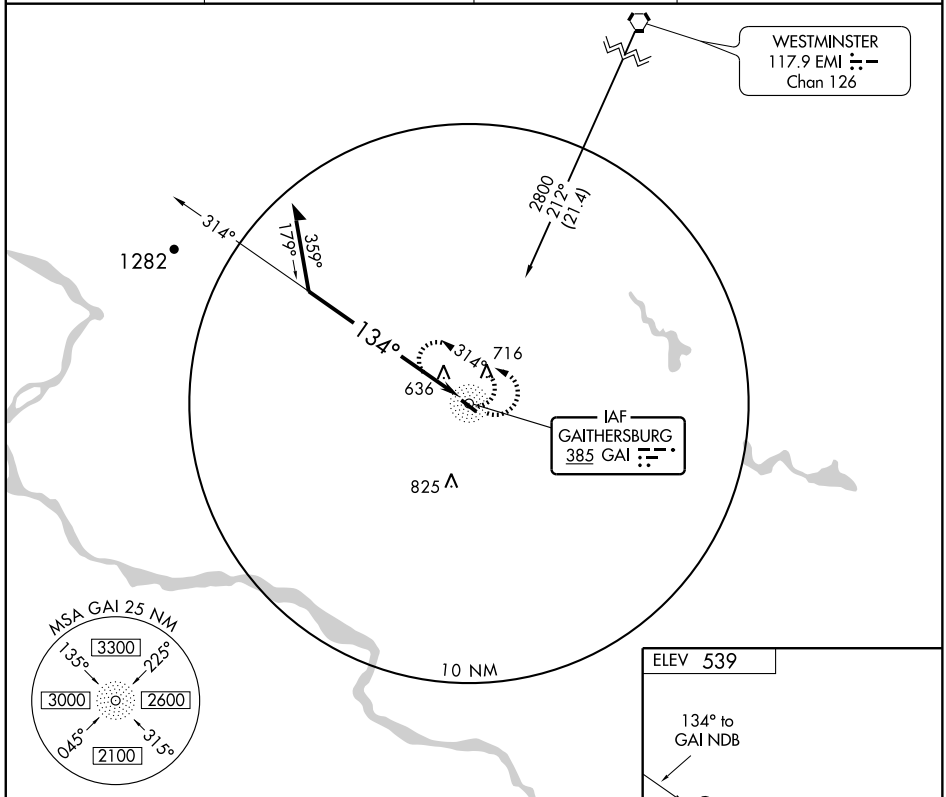
NDB RWY 14

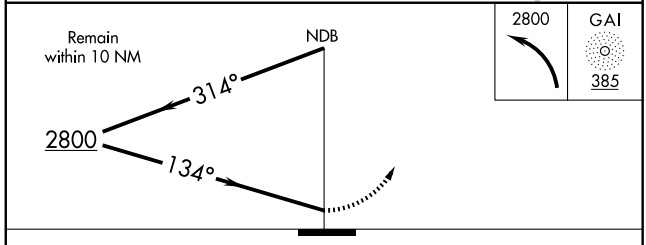
GAITHERSBURG/ MONTGOMERY COUNTY AIRPARK (GAI)

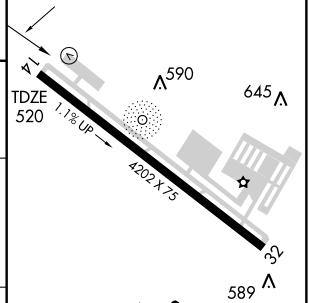
Circling to Rwy 32 NA at night.
If local altimeter not received, use Washington Dulles Intl altimeter setting and increase all MDAs 80 feet.

MISSED APPROACH: Climbing left turn to 2800 in GAI NDB holding pattern.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.275	128.7 291.625	121.6	123.075 (CTAF)







REIL Rwys 14 and 32
MIRL Rwy 14-32

CATEGORY	A	B	C	D
S-14	1380-1 860 (900-1)	1380-1¼ 860 (900-1¼)	1380-2½ 860 (900-2½)	1380-2¾ 860 (900-2¾)
CIRCLING	1380-1 841 (900-1)	1380-1¼ 841 (900-1¼)	1380-2½ 841 (900-2½)	1380-2¾ 841 (900-2¾)

Knots	60	90	120	150	180
Min:Sec					

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS CH 77502 W14A	APP CRS 136°	Rwy Idg 4202 TDZE 520 Apt Elev 539

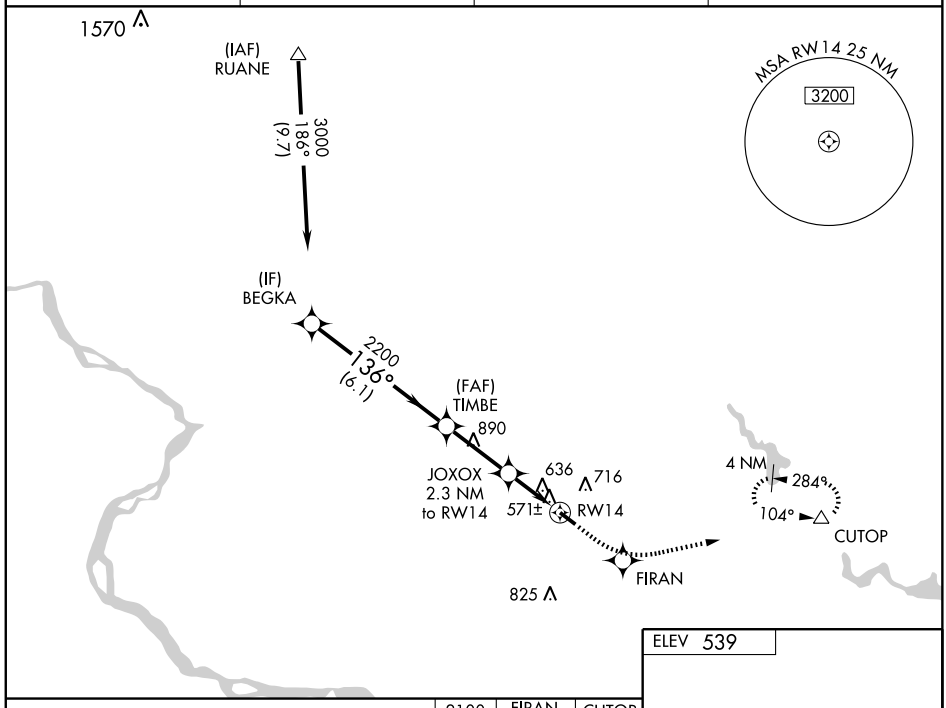
RNAV (GPS) RWY 14

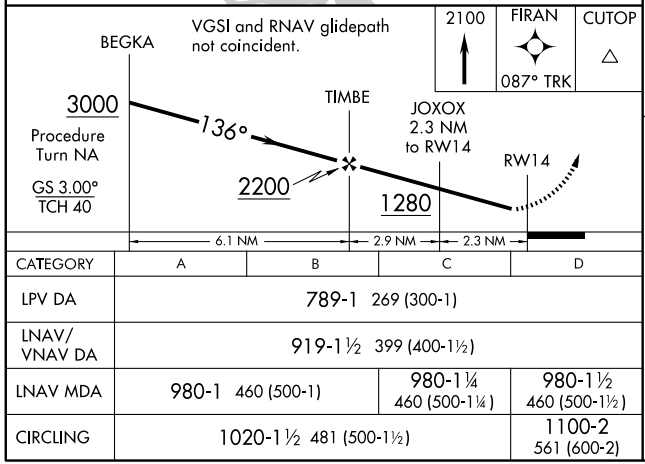
GAITHERSBURG/ MONTGOMERY COUNTY AIRPARK (GAI)

Baro-VNAV NA below -16°C (4°F). DME/DME RNP-0.3 NA. If local altimeter setting not received, use Washington Dulles Intl altimeter setting and increase all DAs/MDAs 80 feet. Baro-VNAV NA when using Washington Dulles Intl altimeter setting. Circling to Rwy 32 NA at night.

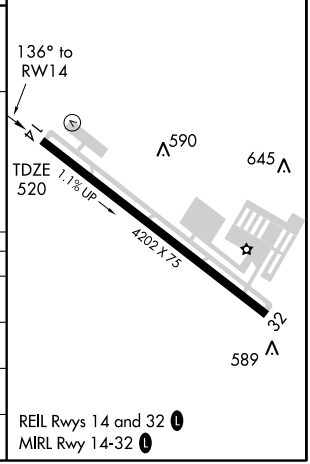
MISSED APPROACH: Climb to 2100 direct FIRAN and via 087° track to CUTOP and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.275	128.7 291.625	121.6	123.075 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	789-1 269 (300-1)			
LNAV/ VNAV DA	919-1½ 399 (400-1½)			
LNAV MDA	980-1 460 (500-1)		980-1¼ 460 (500-1¼)	980-1½ 460 (500-1½)
CIRCLING	1020-1½ 481 (500-1½)			1100-2 561 (600-2)



REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VOR FDK	APP CRS	Rwy Idg	4202
109.0	155°	TDZE	523
		Apt Elev	538

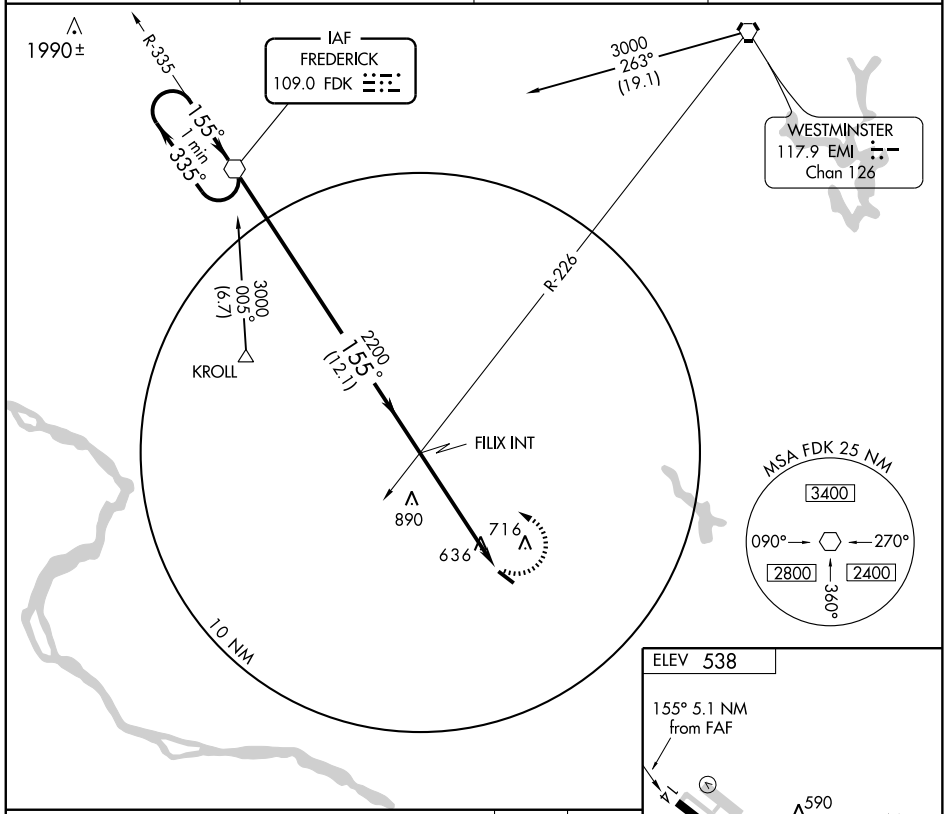
VOR RWY 14

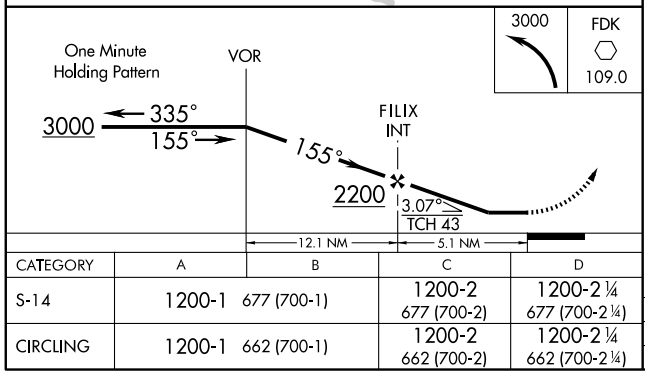
GAITHERSBURG/ MONTGOMERY COUNTY AIRPARK (GAI)

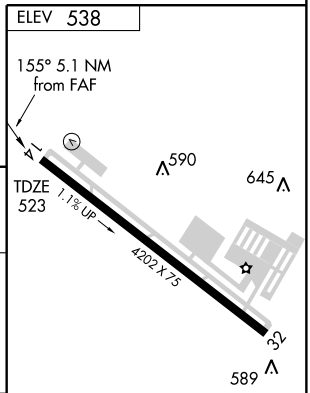
Circling to Rwy 32 NA at night.
If local altimeter not received, use Washington Dulles Intl altimeter setting and increase all MDAs 80 feet.
NA

MISSED APPROACH: Climbing left turn to 3000 direct FDK VOR and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL	UNICOM
128.275	128.7 291.625	121.6	123.075 (CTAF) L







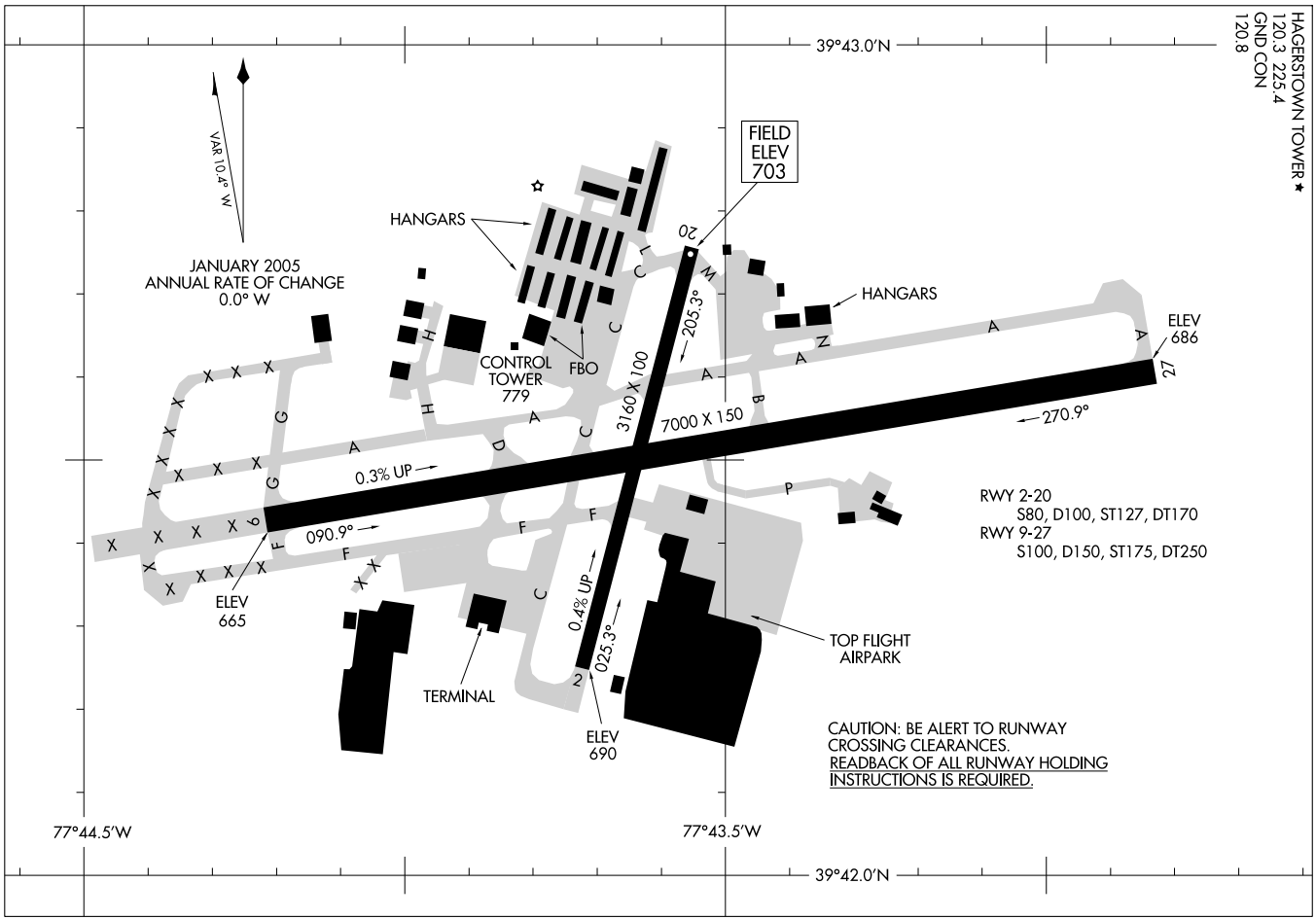
CATEGORY	A	B	C	D
S-14	1200-1	677 (700-1)	1200-2 677 (700-2)	1200-2¼ 677 (700-2¼)
CIRCLING	1200-1	662 (700-1)	1200-2 662 (700-2)	1200-2¼ 662 (700-2¼)

REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NE-3. 17 DEC 2009 to 14 JAN 2010


AIRPORT DIAGRAM
HAGERSTOWN RGNL-RICHARD A HENSON FIELD (HGR)
AL-5114 (FAA)
HAGERSTOWN, MARYLAND
09015
HAGERSTOWN TOWER ★
120.3 225.4
GND CON
120.8
39°43.0'N
39°42.0'N
77°44.5'W
77°43.5'W
VAR 10.4° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.0° W
FIELD
ELEV
703
HANGARS
HANGARS
CONTROL
TOWER
779
FBO
ELEV
686
ELEV
665
ELEV
690
TERMINAL
TOP FLIGHT
AIRPARK
3160 X 100
7000 X 150
205.3°
270.9°
090.9°
025.3°
0.3% UP
0.4% UP
RWY 2-20
S80, D100, ST127, DT170
RWY 9-27
S100, D150, ST175, DT250
CAUTION: BE ALERT TO RUNWAY
CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING
INSTRUCTIONS IS REQUIRED.

LOC/DME I-UYK	APP CRS	Rwy Idg	7000
111.9	089°	TDZE	695
Chan 56		Apt Elev	703

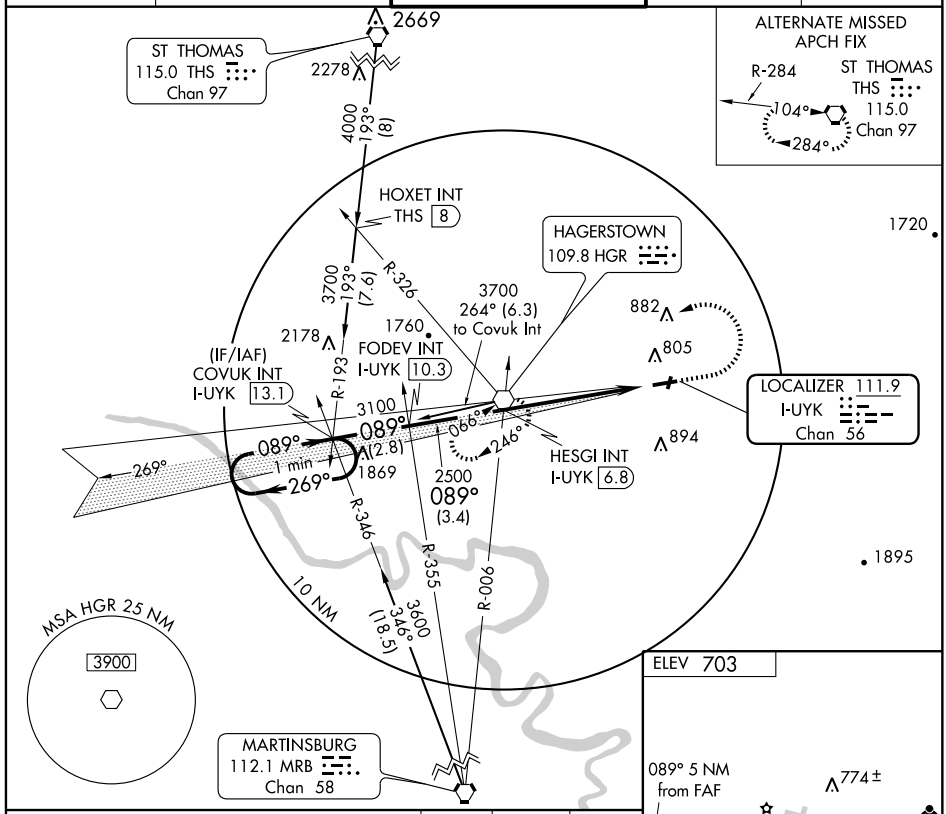
ILS or LOC RWY 9

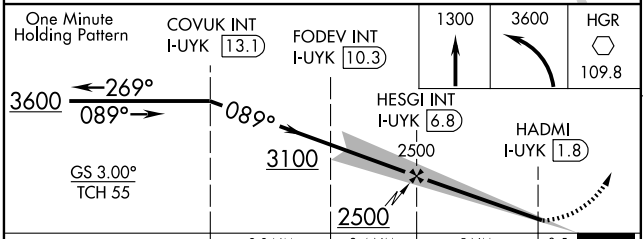
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)

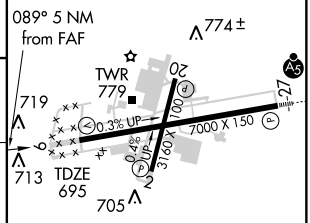
▼ If local altimeter setting not received, use Martinsburg altimeter setting and increase DA to 966, increase all MDAs 80 feet.

MISSED APPROACH: Climb to 1300 then climbing left turn to 3600 direct HGR VOR and hold, continue climb-in-hold to 3600.

ASOS	WASHINGTON CENTER	HAGERSTOWN TOWER ★	GND CON	UNICOM
126.375	134.15 385.4	120.3 (CTAF) L 225.4	120.8	122.95







REIL Rwys 2, 9, 20, and 27 L
MIRL Rwy 2-20 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-ILS 9	895-¾ 200 (200-¾)			
S-LOC 9	980-1 285 (300-1)			
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160-1½ 457 (500-1½)	1260-2 557 (600-2)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

NE-3. 17 DEC 2009 to 14 JAN 2010

LOC/DME I-HGR	APP CRS	Rwy Idg 7000
111.9	269°	TDZE 701
Chan 56		Apt Elev 703

ILS or LOC RWY 27

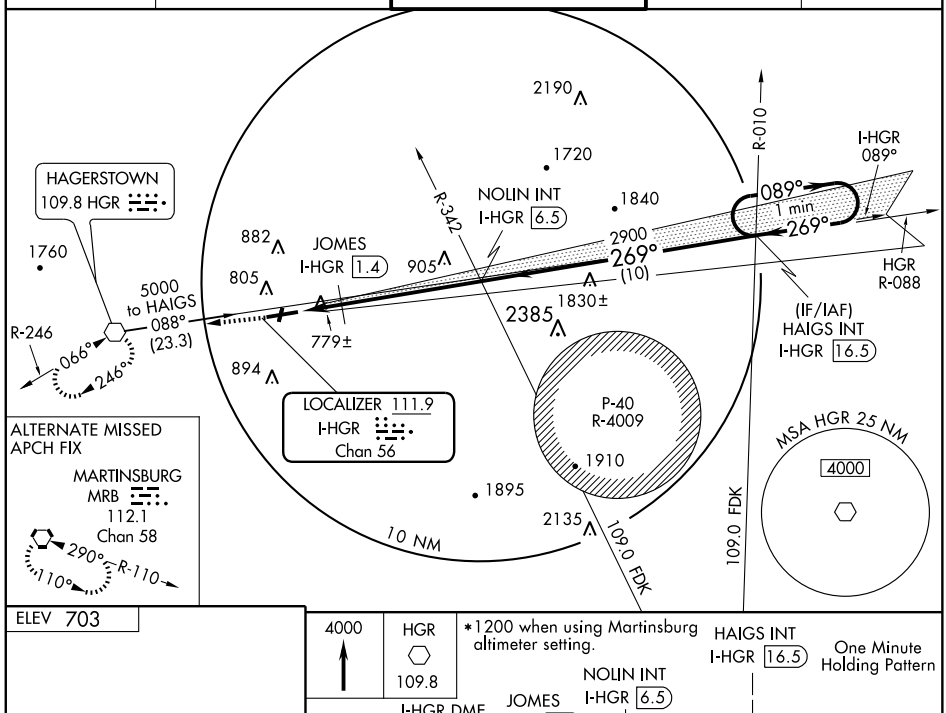
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)

When local altimeter setting not received; use Martinsburg altimeter setting and increase DA to 971 and all MDA 80 feet; increase S-LOC 27 Cat D and JOMES Fix minimum S-LOC 27 Cat C visibility ¼ mile. VDP NA when using Martinsburg altimeter setting. For inoperative MALSR, increase JOMES Fix minimums S-LOC 27 Cat D visibility ¼ mile. For inoperative MALSR, when using Martinsburg altimeter setting, increase S-ILS 27 all Cats visibility ½ mile.

MALSR

MISSED APPROACH: Climb to 4000 direct HGR VOR and hold, continue climb-in-hold to 4000.

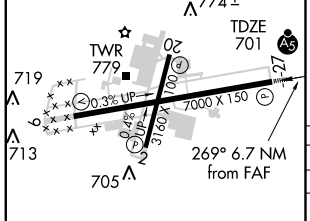
ASOS	WASHINGTON CENTER	HAGERSTOWN TOWER ★	GND CON	UNICOM
126.375	134.15 385.4	120.3 (CTAF) L 225.4	120.8	122.95



ALTERNATE MISSED APCH FIX

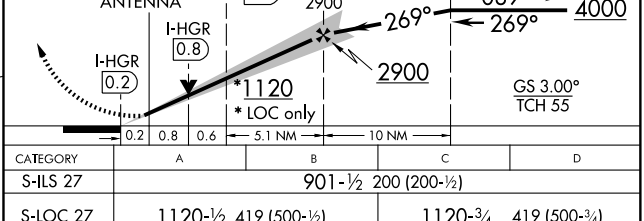
MARTINSBURG
MRB
112.1
Chan 58
290°
R-110
110°

ELEV 703



REIL Rwys 2, 9, 20, and 27 L
MIRL Rwy 2-20 L
HIRL Rwy 9-27 L

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14



CATEGORY	A	B	C	D
S-ILS 27	901-½ 200 (200-½)			
S-LOC 27	1120-½ 419 (500-½)		1120-¾ 419 (500-¾)	
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160 -1½ 457 (500-1½)	1260-2 557 (600-2)
JOMES FIX MINIMUMS				
S-LOC 27	1040-½ 339 (400-½)			1040-¾ 339 (400-¾)
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160-1½ 457 (500-1½)	1260-2 557 (600-2)

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS CH 49011 W09A	APP CRS 088°	Rwy Idg 7000 / TDZE 695 / Apt Elev 703

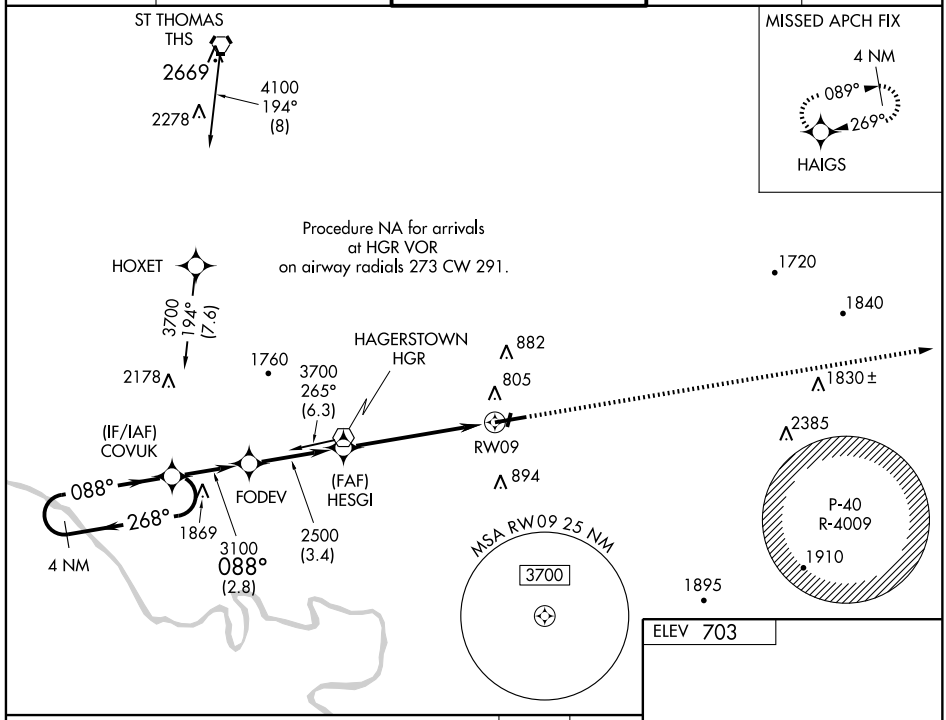
RNAV (GPS) RWY 9

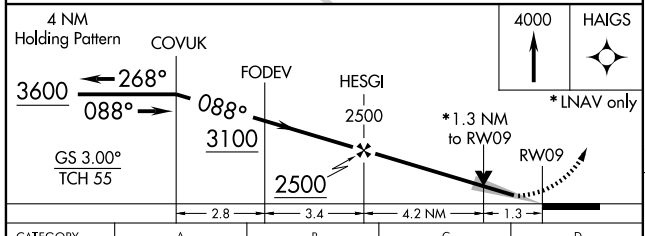
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)

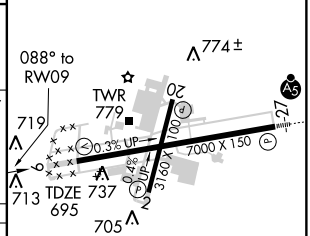
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase LPV DA to 965, LNAV/VNAV DA to 1101, and all MDA 80 feet; increase LPV all Cats, LNAV/VNAV all Cats, and LNAV Cats C and D visibility ¼ mile. VDP and Baro-VNAV NA when using Martinsburg altimeter setting.

MISSED APPROACH: Climb to 4000 direct HAIGS and hold.

ASOS	WASHINGTON CENTER	HAGERSTOWN TOWER ★	GND CON	UNICOM
126.375	134.15 385.4	120.3 (CTAF) L 225.4	120.8	122.95







CATEGORY	A	B	C	D
LPV DA	895-¾ 200 (200-¾)			
LNAV/VNAV DA	1031-1¼ 336 (400-1¼)			
LNAV MDA	1140-1 445 (500-1)		1140-1¼ 445 (500-1¼)	1140-1½ 445 (500-1½)
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160-1½ 457 (500-1½)	1260-2 557 (600-2)

REIL Rwys 2, 9, 20, and 27 L
MIRL Rwy 2-20 L
HIRL Rwy 9-27 L

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	7000
CH 86911	269°	TDZE	701
W27A		Apt Elev	703

RNAV (GPS) RWY 27

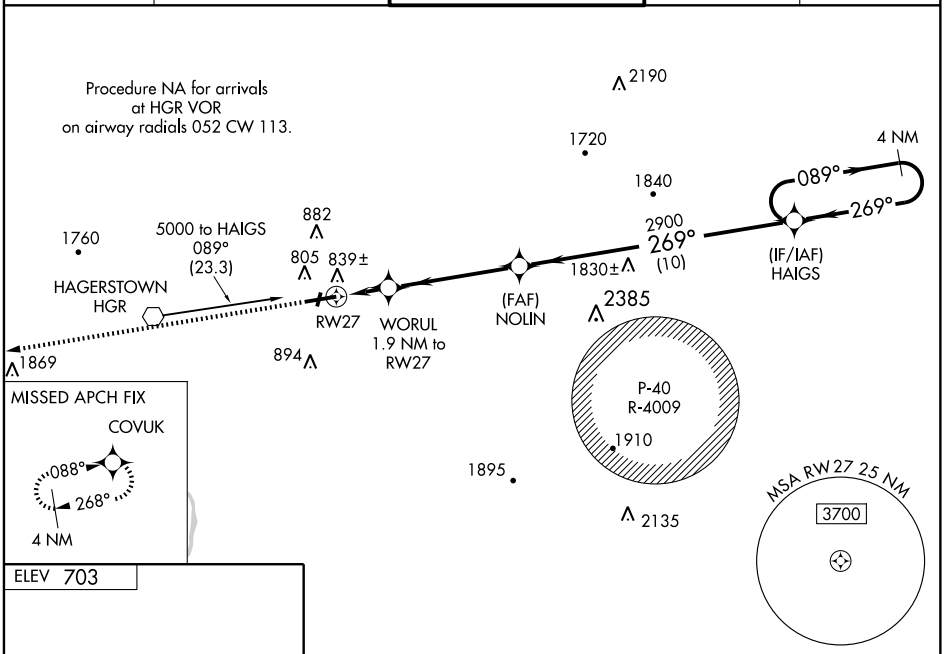
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)

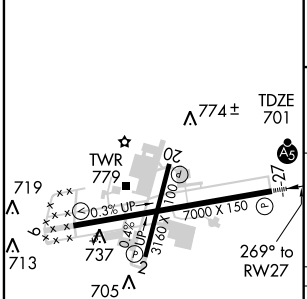
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Martinsburg altimeter setting and increase LPV DA to 971, LNAV/VNAV DA to 1175, and all MDA 80 feet; increase LNAV/VNAV all Cats, and LNAV Cat C visibility ¼ mile. VDP and Baro-VNAV NA when using Martinsburg altimeter setting. For inoperative MALSR, increase LNAV Cat D visibility ¼ mile. For inoperative MALSR when using Martinsburg altimeter setting, increase LPV all Cats visibility ½ .

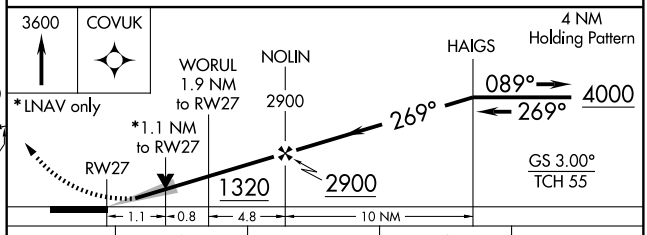
MALSR

MISSED APPROACH: Climb to 3600 direct COVUK and hold.

ASOS	WASHINGTON CENTER	HAGERSTOWN TOWER ★	GND CON	UNICOM
126.375	134.15 385.4	120.3 (CTAF) L 225.4	120.8	122.95







CATEGORY	A	B	C	D
LPV DA	901-½ 200 (200-½)			
LNAV/VNAV DA	1105-1 404 (500-1)			
LNAV MDA	1100-½ 399 (400-½)			1100-1 399 (400-1)
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160-1½ 457 (500-1½)	1260-2 557 (600-2)

REIL Rwys 2, 9, 20, and 27 L
MIRL Rwy 2-20 L
HIRL Rwy 9-27 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VOR HGR 109.8	APP CRS 091°	Rwy Idg 7000 TDZE 695 Apt Elev 703

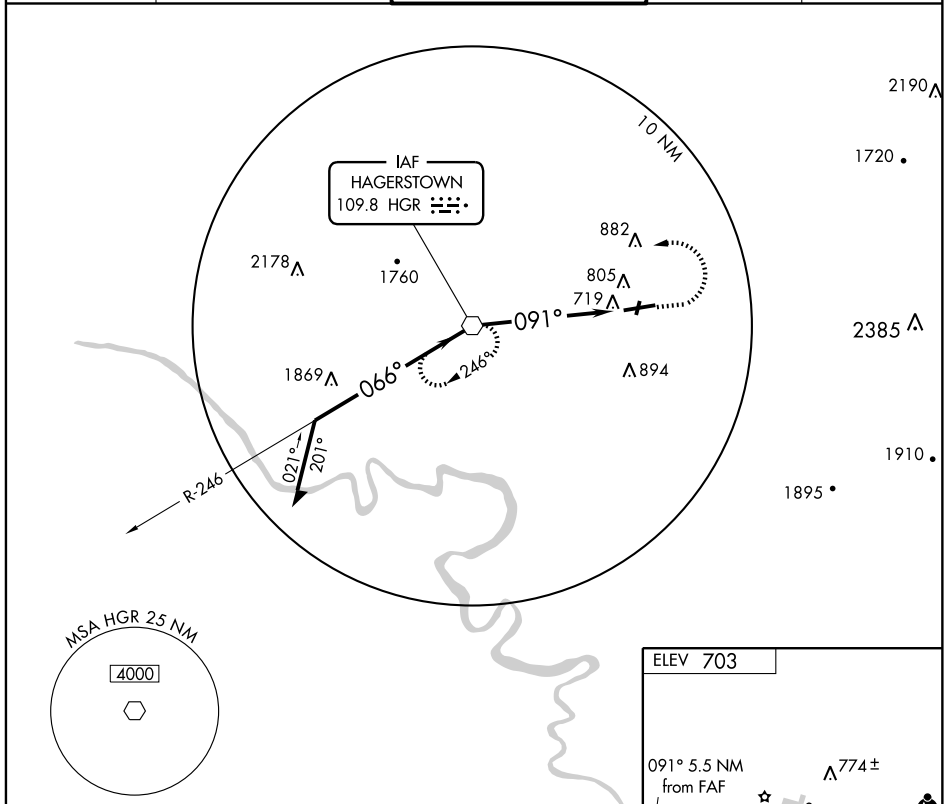
VOR RWY 9

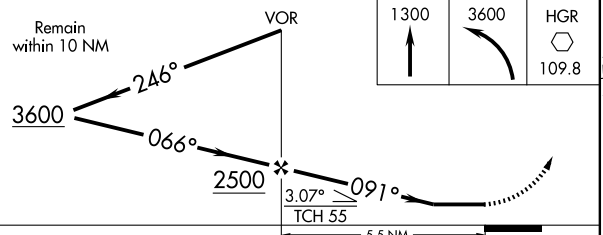
HAGERSTOWN RGNL-RICHARD A. HENSON FIELD (HGR)

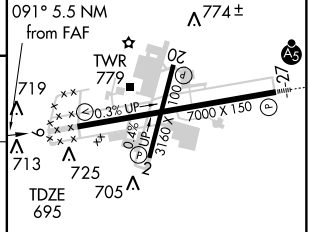
When local altimeter setting not received, use Martinsburg altimeter setting and increase all MDA 80 feet; increase S-9 Cat C and D visibility ¼ mile.

MISSED APPROACH: Climb to 1300 then climbing left turn to 3600 direct HGR VOR and hold, continue climb-in-hold to 3600.

ASOS	WASHINGTON CENTER	HAGERSTOWN TOWER ★	GND CON	UNICOM
126.375	134.15 385.4	120.3 (CTAF) L 225.4	120.8	122.95







REIL Rwys 2, 9, 20, and 27 L
MIRL Rwy 2-20 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-9	1060-1 365 (400-1)			1060-1¼ 365 (400-1¼)
CIRCLING	1140-1 437 (500-1)	1160-1 457 (500-1)	1160-1½ 457 (500-1½)	1260-2 557 (600-2)

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	3000
356°	TDZE	168
	Apt Elev	171

RNAV (GPS) RWY 36

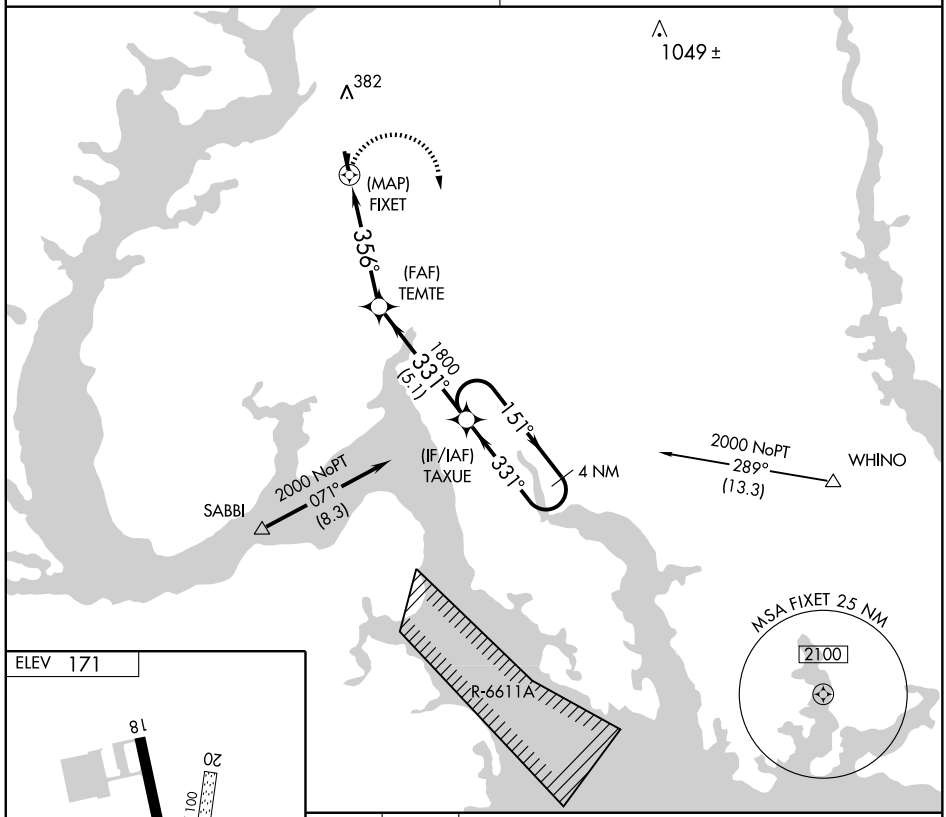
INDIAN HEAD/ MARYLAND (2W5)

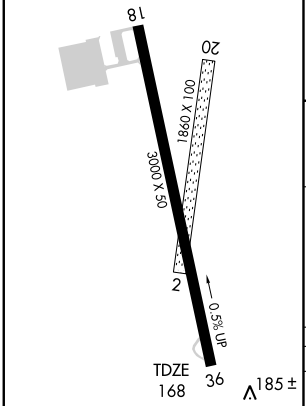
Use Ronald Reagan Washington National altimeter setting. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA. Procedure NA at night.

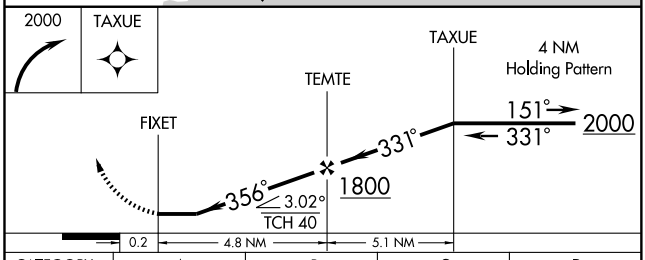
NA

MISSED APPROACH: Climbing right turn to 2000 direct TAXUE WP and hold.

POTOMAC APP CON	UNICOM
119.85 322.3	122.7 (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	600 - 1	432 (500-1)	NA	
CIRCLING	760 - 1	589 (600-1)	NA	

LIRL Rwy 18-36

NE-3, 17 DEC 2009 to 14 JAN 2010

VORTAC OTT 113.7 Chan 84	APP CRS 078°	Rwy Idg N/A TDZE N/A Apt Elev 171

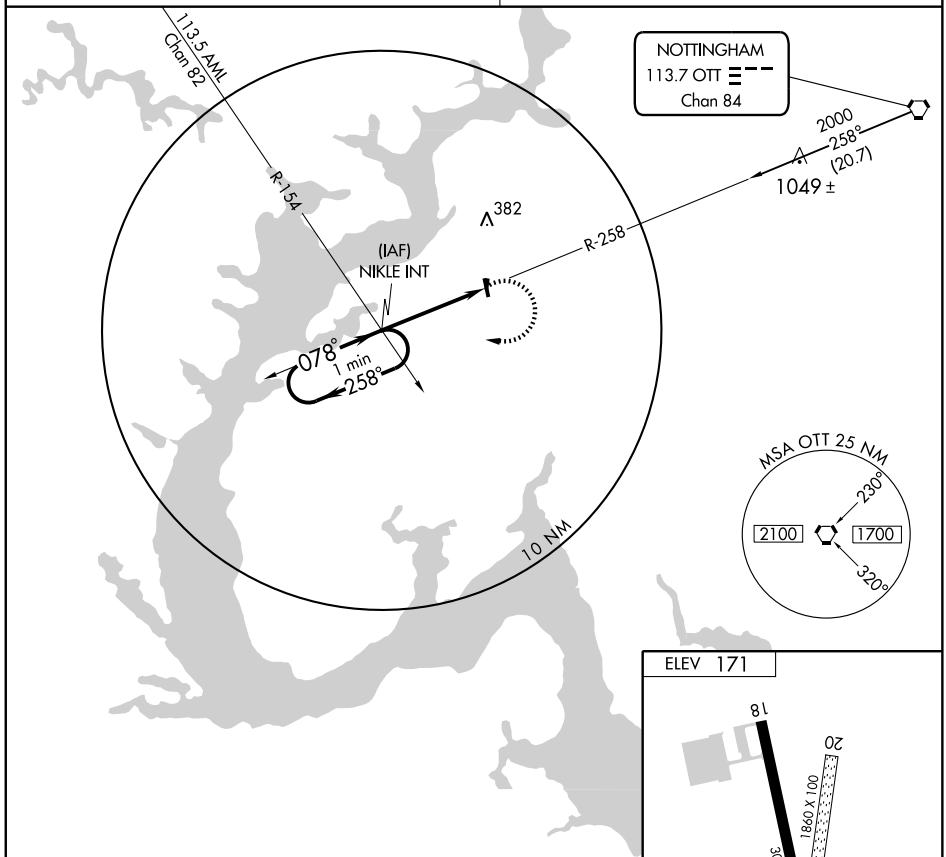
VOR-A

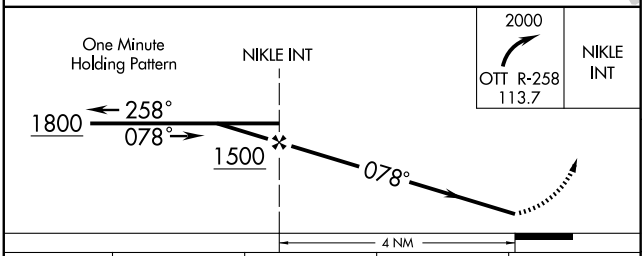
INDIAN HEAD/ MARYLAND (2W5)

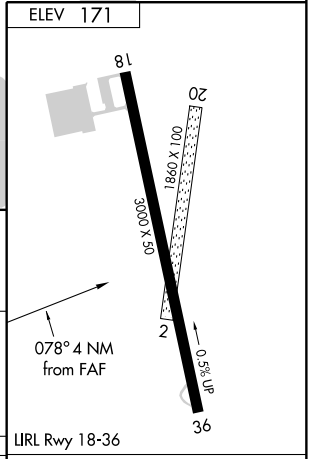
NA Use Ronald Reagan Washington National altimeter setting. Procedure NA at night.

MISSED APPROACH: Climbing right turn to 2000 via OTT R-258 to NIKLE Int and hold.

POTOMAC APP CON	UNICOM
119.85 322.3	122.7 (CTAF)







CATEGORY	A	B	C	D
CIRCLING	760 - 1	589 (600-1)	NA	

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	4150
CH 70502	112°	TDZE	142
W11A		Apt Elev	142

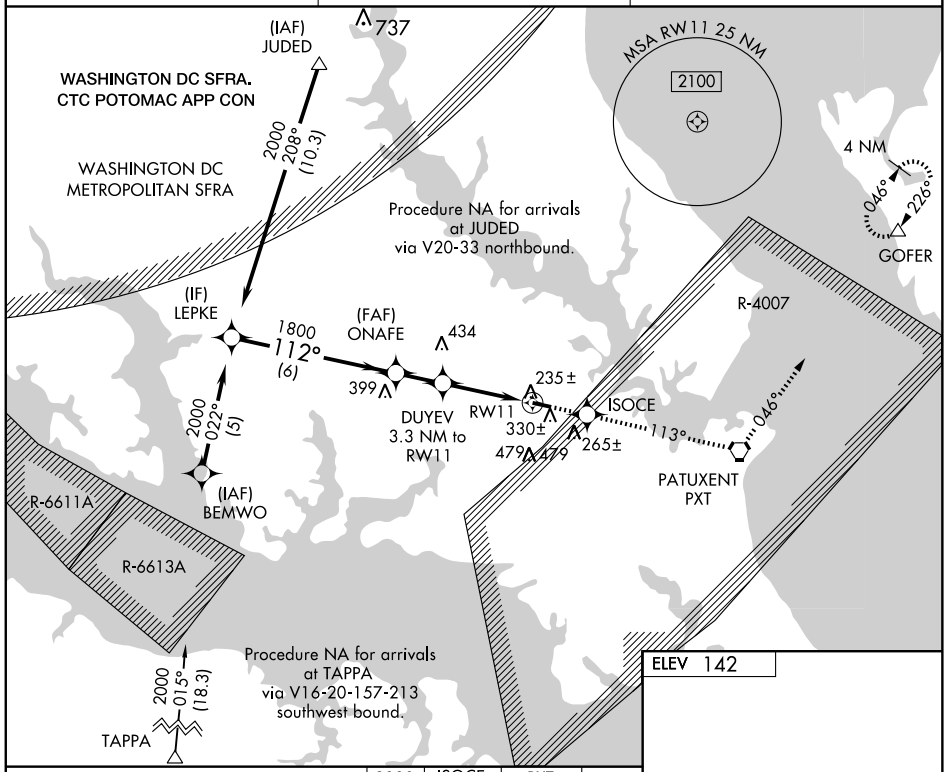
RNAV (GPS) RWY 11

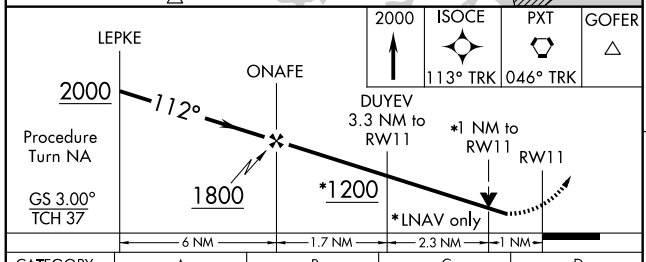
LEONARDTOWN/ ST. MARY'S COUNTY RGNL (2W6)

Circling to Rwy 29 NA at night. If local altimeter setting not received, use Patuxent River altimeter setting and increase all DAs/MDAs 40 feet. DME/DME RNP-0.3 NA. VDP NA with Patuxent River altimeter setting. Visibility reduction by helicopters NA.

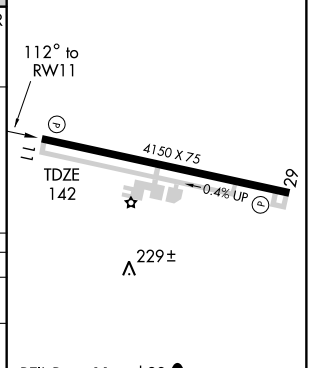
MISSED APPROACH: Climb to 2000 direct ISOCE and via 113° track to PXT VORTAC and 046° track to GOFER and hold.

AWOS-3	PATUXENT APP CON ★	UNICOM
119.575	121.0 250.3	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	440-1	298 (300-1)	NA	
LNAV MDA	500-1	358 (400-1)	NA	
CIRCLING	660-1	518 (600-1)	NA	



NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	4150
CH 61313	292°	TDZE	137
W29A		Apt Elev	142

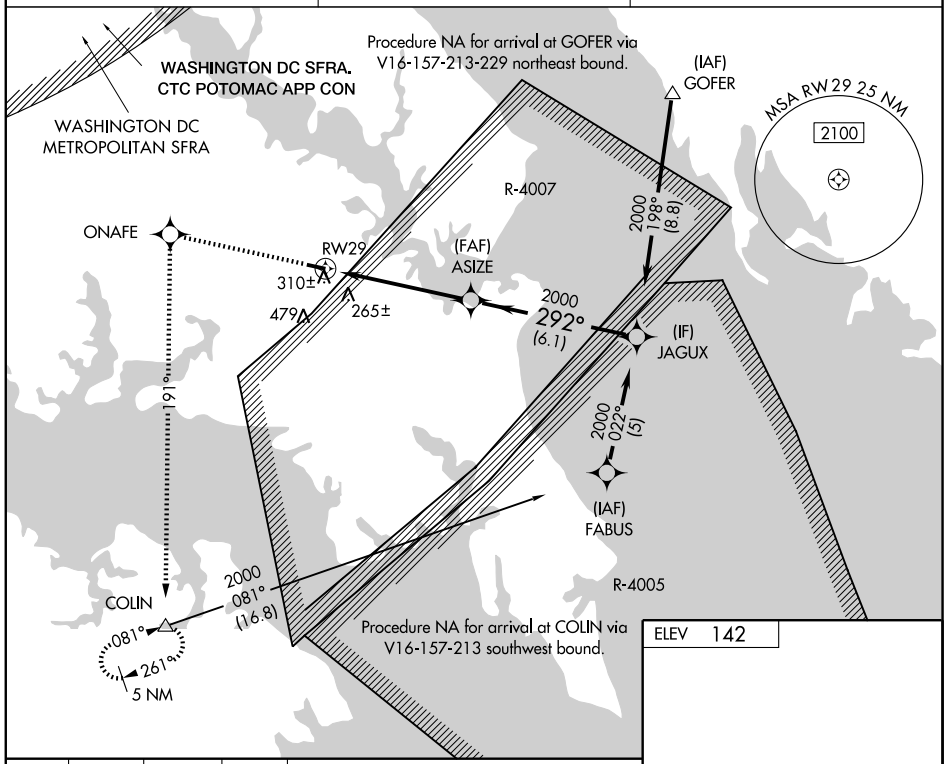
RNAV (GPS) RWY 29

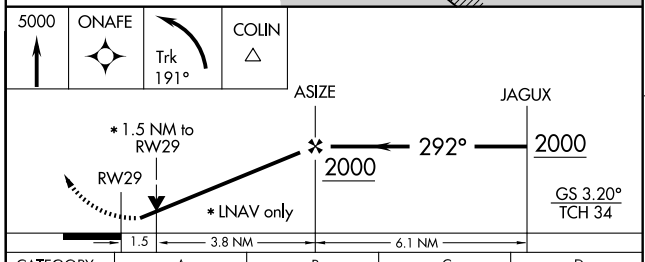
LEONARDTOWN/ ST. MARY'S COUNTY RGNL (2W6)

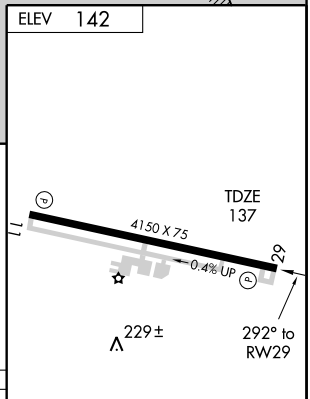
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting note received, use Patuxent River altimeter setting and increase all DA 31 feet and all MDA 40 feet. Baro-VNAV and VDP NA when using Patuxent River altimeter setting.

MISSED APPROACH: Climb to 5000 direct ONAFE and left turn via track 191° to COLIN and hold, continue climb-in-hold to 5000.

AWOS-3	PATUXENT APP CON ★	UNICOM
119.575	121.0 250.3	123.0 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	480-1¼	343 (400-1¼)	NA	
LNAV/VNAV DA	610-1¾	473 (500-1¾)	NA	
LNAV MDA	620-1	483 (500-1)	NA	
CIRCLING	660-1	518 (600-1)	NA	

REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC PXT	APP CRS	Rwy Idg	4150
117.6	293°	TDZE	137
Chan 123		Apt Elev	142

VOR or GPS RWY 29

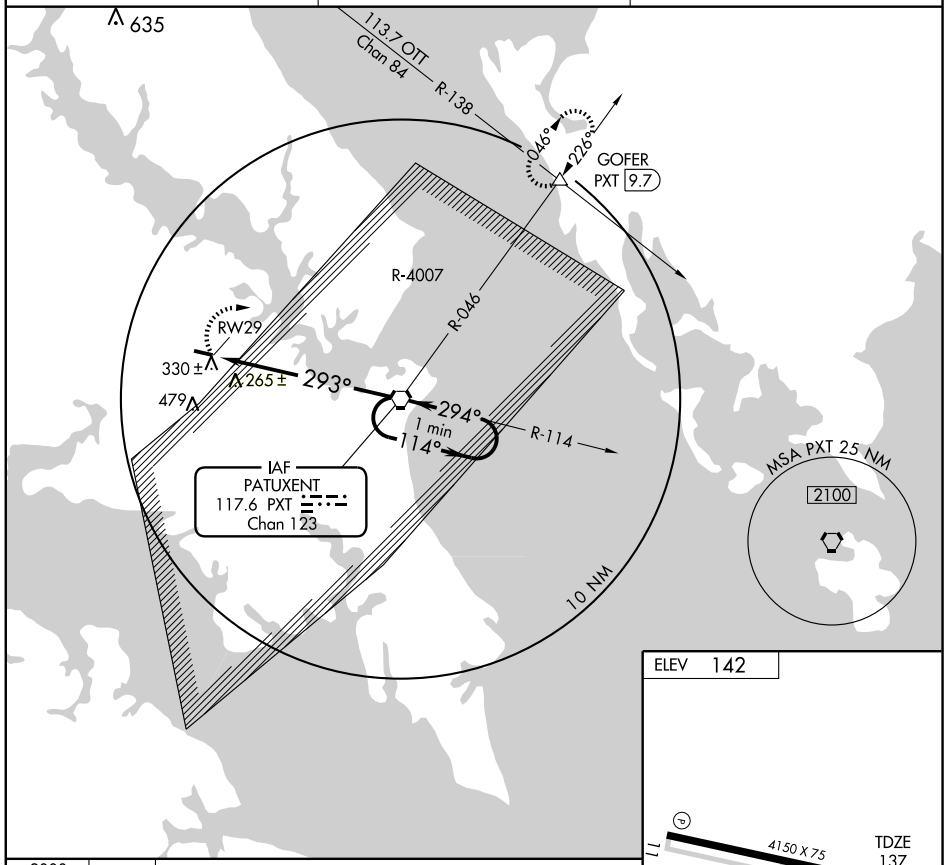
LEONARDTOWN/ ST. MARY'S COUNTY RGNL (2W6)

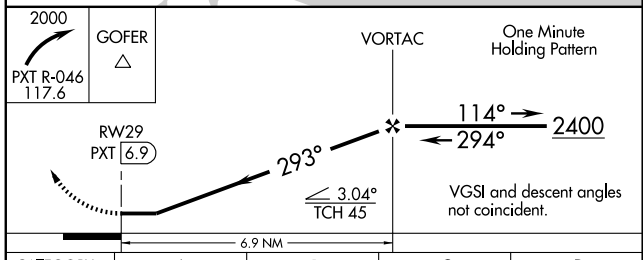
NA

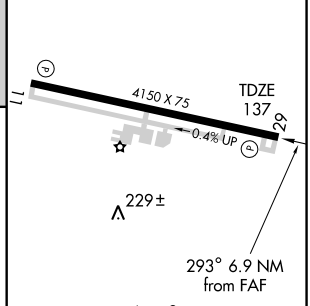
Use NAS Patuxent River altimeter setting.

MISSED APPROACH: Climbing right turn to 2000 via PXT R-046 to GOFER Int and hold.

AWOS-3	PATUXENT APP CON ★	UNICOM
119.575	121.0 250.3	123.0 (CTAF) L







REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

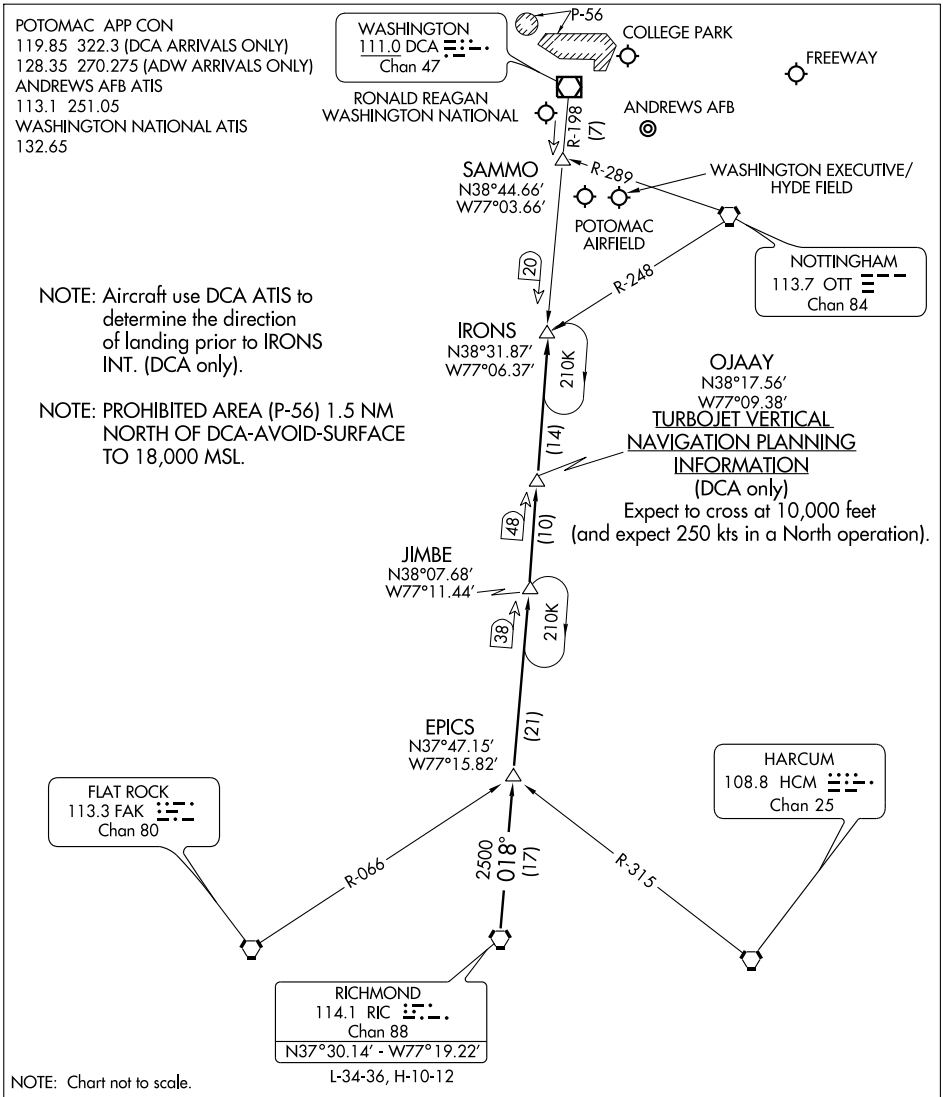
CATEGORY	A	B	C	D
S-29	680-1	543 (600-1)	NA	
CIRCLING	680-1	538 (600-1)	NA	

FAF to MAP 6.9 NM					
Knots	60	90	120	150	180
Min:Sec	6:54	4:36	3:27	2:46	2:18

NE-3. 17 DEC 2009 to 14 JAN 2010

IRONS FOUR ARRIVAL

WASHINGTON, DC



RICHMOND TRANSITION (RIC.IRONS4): From over RIC VORTAC via RIC R-018 and DCA R-198 to IRONS INT. Thence. . . .

. . . .From over IRONS INT:
Ronald Reagan Washington National Airport (DCA only):
LANDING SOUTH: Then via DCA R-198 to SAMMO INT, heading for vectors to the final approach course.
LANDING NORTH: Expect vectors to final approach course.
All other airports: Expect vectors.

APP CRS	Rwy Idg	2420
190°	TDZE	168
	Apt Elev	168

RNAV (GPS) RWY 18

MITCHELLVILLE / FREEWAY (W00)

Use Andrews AFB altimeter setting.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
NA Straight-in and Circling minimums NA at night to Rwy 18.

MISSED APPROACH: Climbing left turn to 2000 direct DEALE WP and hold.

POTOMAC APP CON ★
119.3 335.5

UNICOM
123.075 (CTAF) L

(IAF) DATED
2100
137°
(11.7)

Procedure NA for arrivals at DATED via V265 northbound.

(IF) CATAY
1800
190°
(5)

(FAF) ADACO
698

1052

1049

MSA RW18 25 NM
2600

348
345±
345±
305±
RW18
305±

ELEV 168
Rwy 36 Idg 2190'
190° to RW18
TDZE 168
18
2420 X 40
0.7% UP
36
186±
186±
MIRL Rwy 18-36 L

138°
318°
4 NM
DEALE

2000
DEALE

CATAY
ADACO
190°
2100
Procedure Turn NA
RW18
2.99°
TCH 47
1800
VGSI and descent angles not coincident.
5 NM
5 NM

CATEGORY	A	B	C	D
LNAV MDA	760-1 592 (600-1)		NA	
CIRCLING	760-1 592 (600-1)		NA	

NE-3. 17 DEC 2009 to 14 JAN 2010

MITCHELLVILLE, MARYLAND AL-6997 (FAA)

APP CRS	Rwy Idg	2190
345°	TDZE	168
	Apt Elev	168

RNAV (GPS) RWY 36

MITCHELLVILLE / FREEWAY (W00)

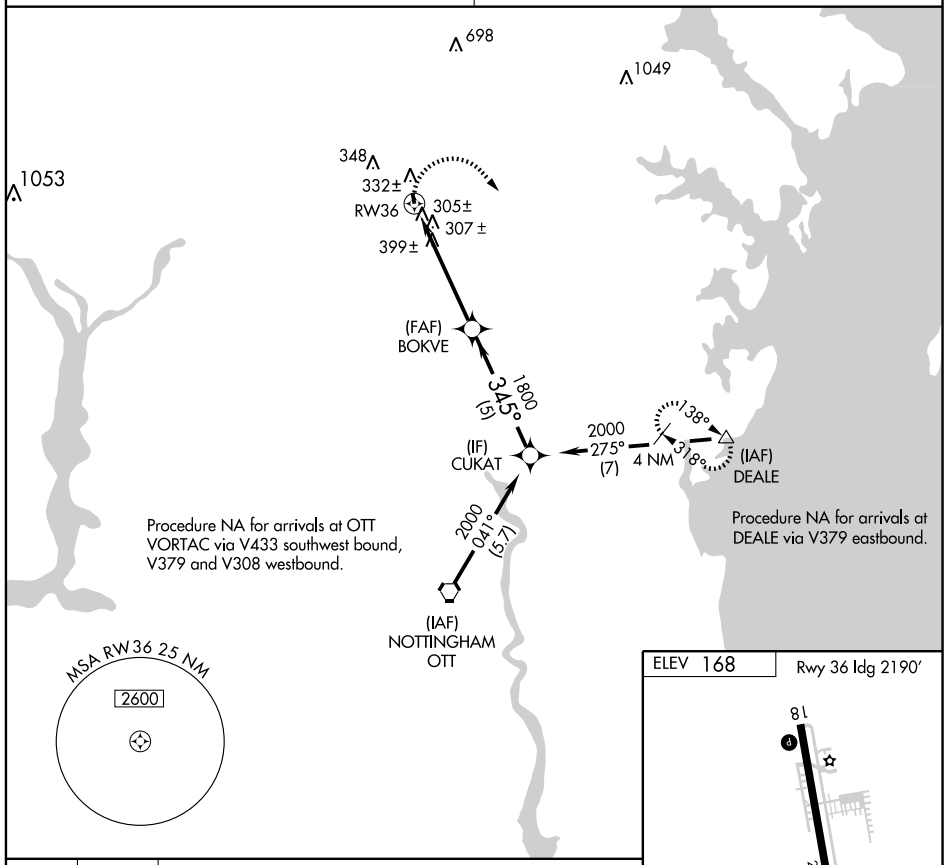
Use Andrews AFB altimeter setting.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Circling NA at night to Rwy 18.

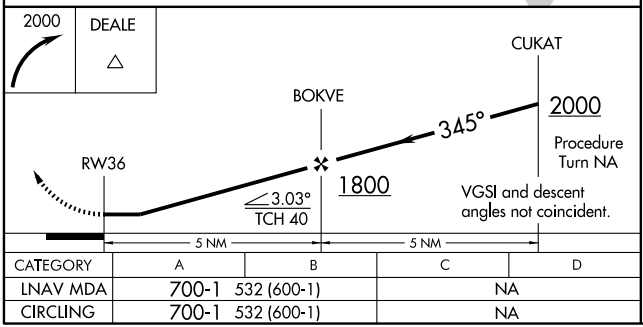
NA

MISSED APPROACH: Climbing right turn to 2000 direct DEALE WP and hold.

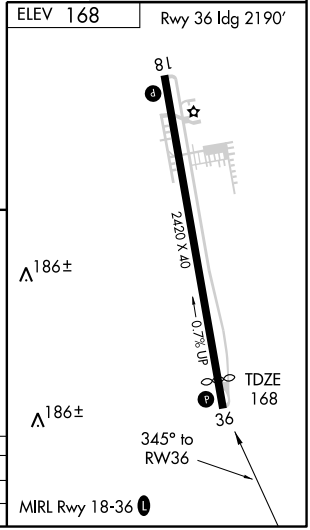
POTOMAC APP CON ★
119.3 335.5

UNICOM
123.075 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	700-1 532 (600-1)		NA	
CIRCLING	700-1 532 (600-1)		NA	



NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	5000
088°	TDZE	2933
	Apt Elev	2933

RNAV (GPS) RWY 9

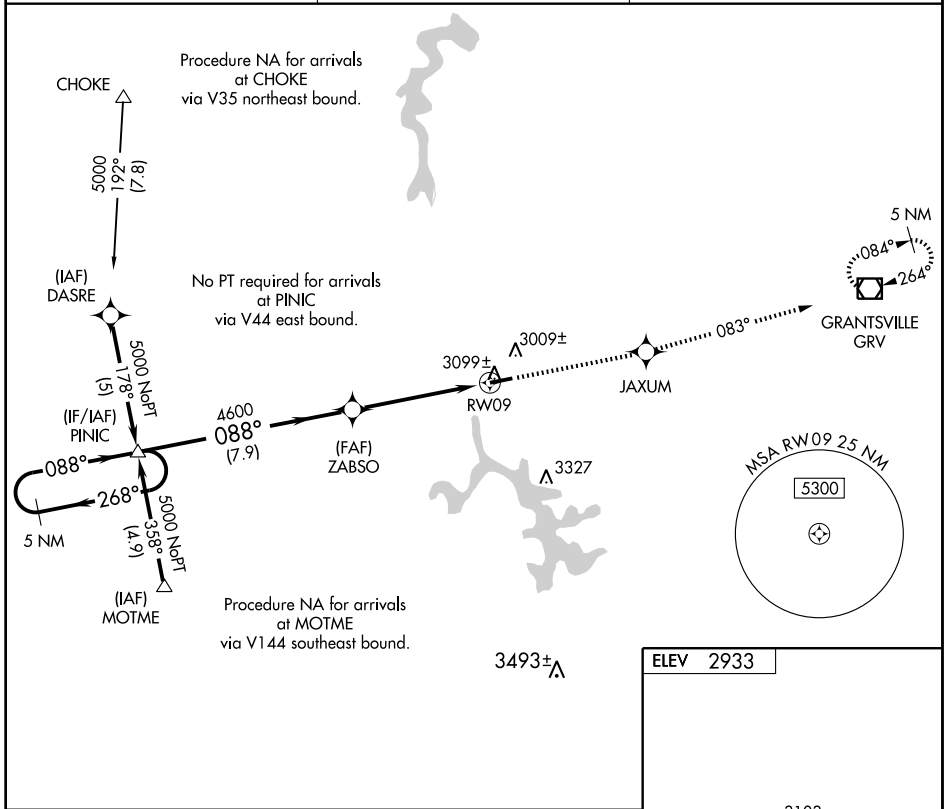
OAKLAND / GARRETT COUNTY (2G4)

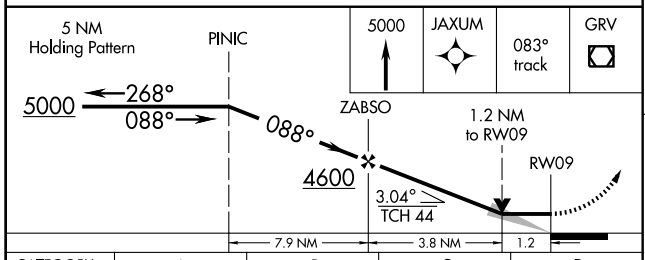
Procedure NA at night. VDP NA when using Morgantown altimeter setting. When local altimeter setting not received, use Morgantown altimeter setting and increase all MDAs 300 feet, LNAV visibility Cat C ¾ mile and Circling Cat B ¾ mile, Cat C ¼ mile. DME/DME RNP-0.3 NA.

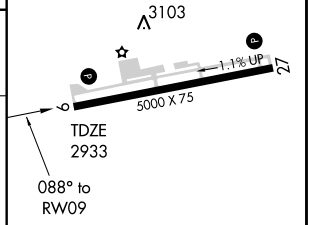
NA

MISSED APPROACH: Climb to 5000 direct JAXUM and via 083° track to GRV VOR/DME and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
120.125	124.4 327.1	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	3360-1	427 (500-1)	3360-1¼ 427 (500-1¼)	NA
CIRCLING	3400-1	467 (500-1)	3400-1½ 467 (500-1½)	NA

REIL Rwys 9 and 27
MIRL Rwy 9-27 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	5000
268°	TDZE	2925
	Apt Elev	2933

RNAV (GPS) RWY 27

OAKLAND / GARRETT COUNTY (2G4)

Procedure NA at night. When local altimeter setting not received, use Morgantown altimeter setting and increase all MDAs 300 feet, LNAV visibility Cat C ¾ mile and Circling Cat B ¼ mile, Cat C ¾ mile. VDP NA when using Morgantown altimeter setting. DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climbing right turn to 5000 direct GRV VOR/DME and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
120.125	124.4 327.1	123.0 (CTAF) L

Procedure NA for arrivals on IHD VORTAC airway radials 098 CW 109.

INDIAN HEAD
IHD

5000
154°
(24.8)

NoPT for arrival on GRV VOR/DME airway radials 092 CW 130.

MSA RW 27 25 NM
5300

3348

5 NM
084°
264°

4500
264°
(8.3)

(IF/IAF)
GRANTSVILLE
GRV

3039±

3099±

268°

(FAF)
JAXUM

RW27

ELEV 2933

3103

1.1% UP

5000 X 75

TDZE
2925

268° to
RW27

REIL Rwys 9 and 27
MIRL Rwy 9-27 L

5000 | GRV

VOR/DME

5 NM
Holding Pattern

084°
264°
5000

1.3 NM
to RW27

JAXUM

RW27

268°
3.04°
TCH 45

4500

1.3 | 3.6 NM | 8.3 NM

CATEGORY	A	B	C	D
LNAV MDA	3340-1 415 (500-1)		3340-1¼ 415 (500-1¼)	NA
CIRCLING	3400-1 467 (500-1)		3400-1½ 467 (500-1½)	NA

NE-3. 17 DEC 2009 to 14 JAN 2010

VOR/DME GRV	APP CRS	Rwy Idg	5000
112.3	264°	TDZE	2925
Chan 70		Apt Elev	2933

VOR RWY 27

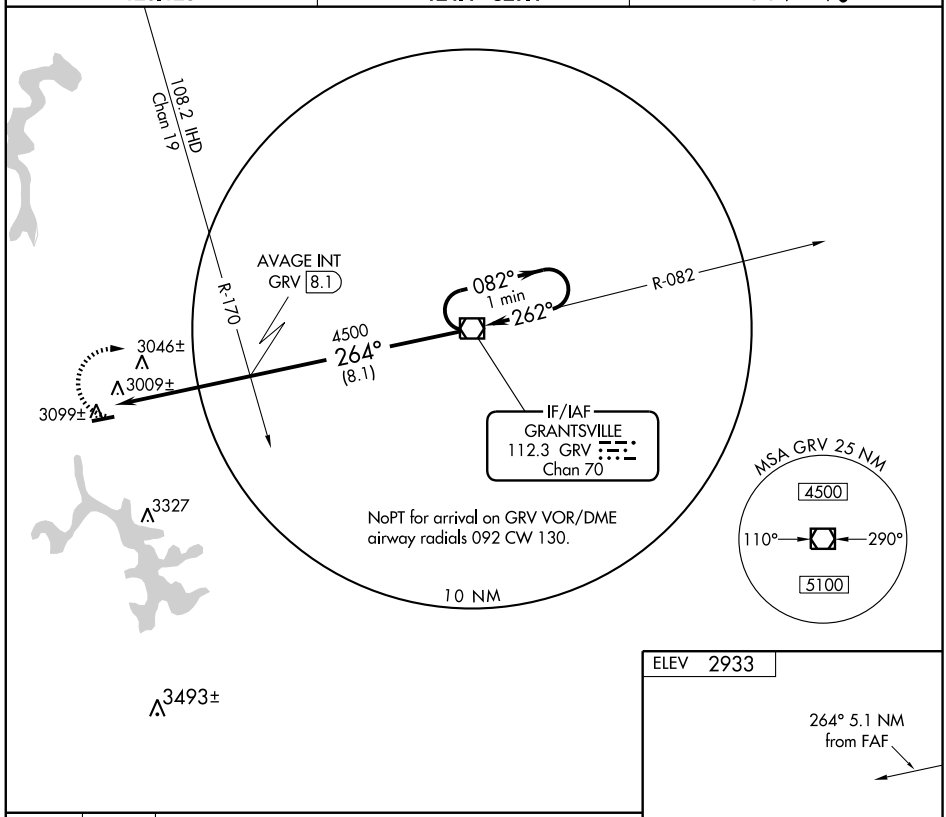
OAKLAND/GARRETT COUNTY (2G4)

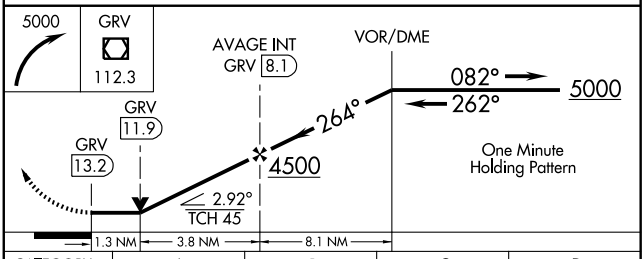
When local altimeter setting not received, use Morgantown altimeter setting and increase all MDAs 300 feet, S-27 visibility Cat C ¾ mile and Circling Cat B ¼ mile, Cat C ¾ mile. VDP NA when using Morgantown altimeter setting.

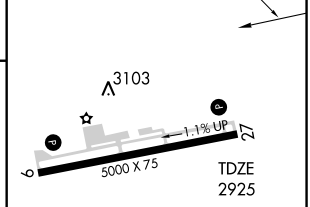
NA

MISSED APPROACH: Climbing right turn to 5000 direct GRV VOR/DME and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
120.125	124.4 327.1	123.0 (CTAF) L







REIL Rwys 9 and 27
MIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-27	3340-1	415 (500-1)	3340-1¼ 415 (500-1¼)	NA
CIRCLING	3400-1	467 (500-1)	3400-1½ 467 (500-1½)	NA

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

NE-3. 17 DEC 2009 to 14 JAN 2010

OCEAN CITY, MARYLAND

AL-5284 (FAA)

LOC RWY 14

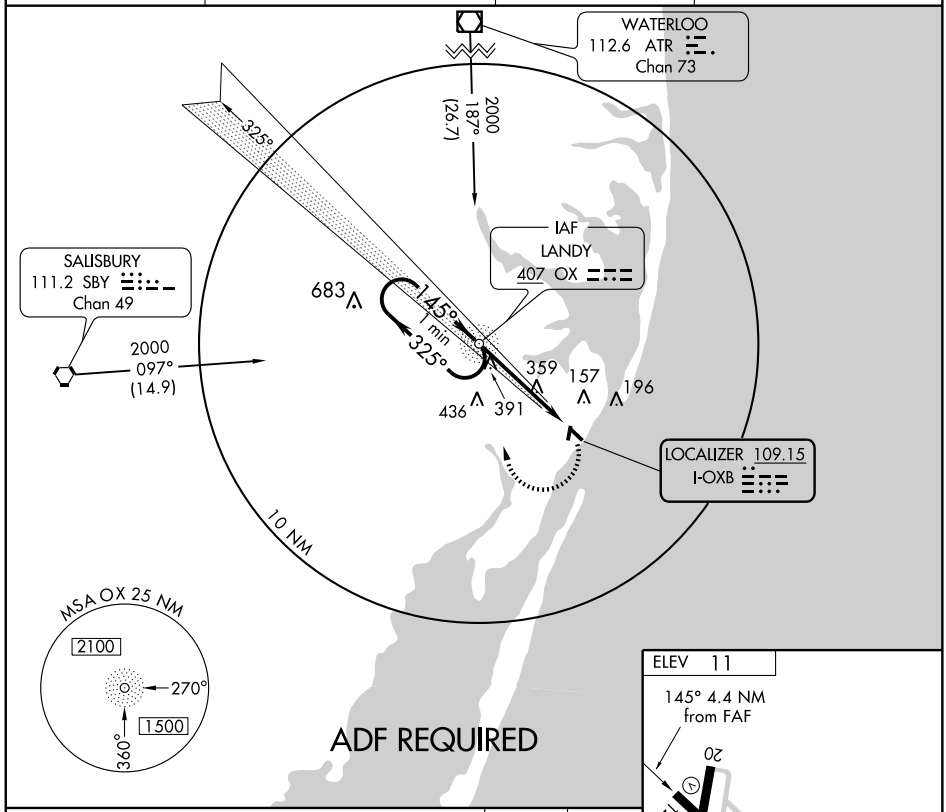
OCEAN CITY MUNI (OXB)

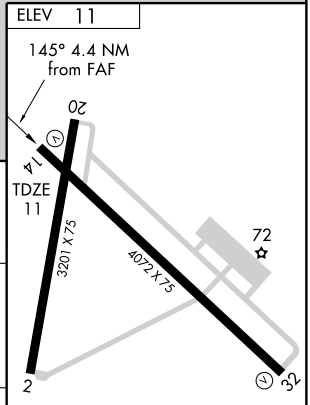
LOC I-OXB	APP CRS	Rwy Idg	4072
109.15	145°	TDZE	11
		Apt Elev	11

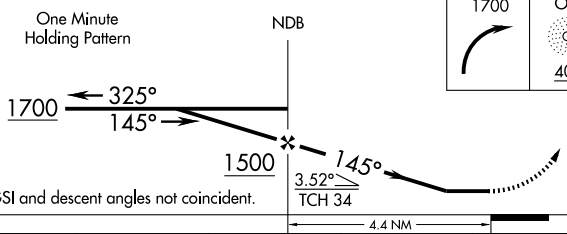
NA

MISSED APPROACH: Climbing right turn to 1700 direct OX NDB and hold.

ASOS	PATUXENT APP CON ★	CLNC DEL	UNICOM
119.025	127.95 314.0	121.75	123.05 (CTAF) L







CATEGORY	A	B	C	D
S-14	700-1	689 (700-1)	700-2 689 (700-2)	700-2¼ 689 (700-2¼)
CIRCLING	700-1	689 (700-1)	700-2 689 (700-2)	720-2¼ 709 (800-2¼)

MIRL Rwys 2-20 and 14-32 L

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

NE-3. 17 DEC 2009 to 14 JAN 2010

OCEAN CITY, MARYLAND

AL-5284 (FAA)

RNAV (GPS) RWY 2

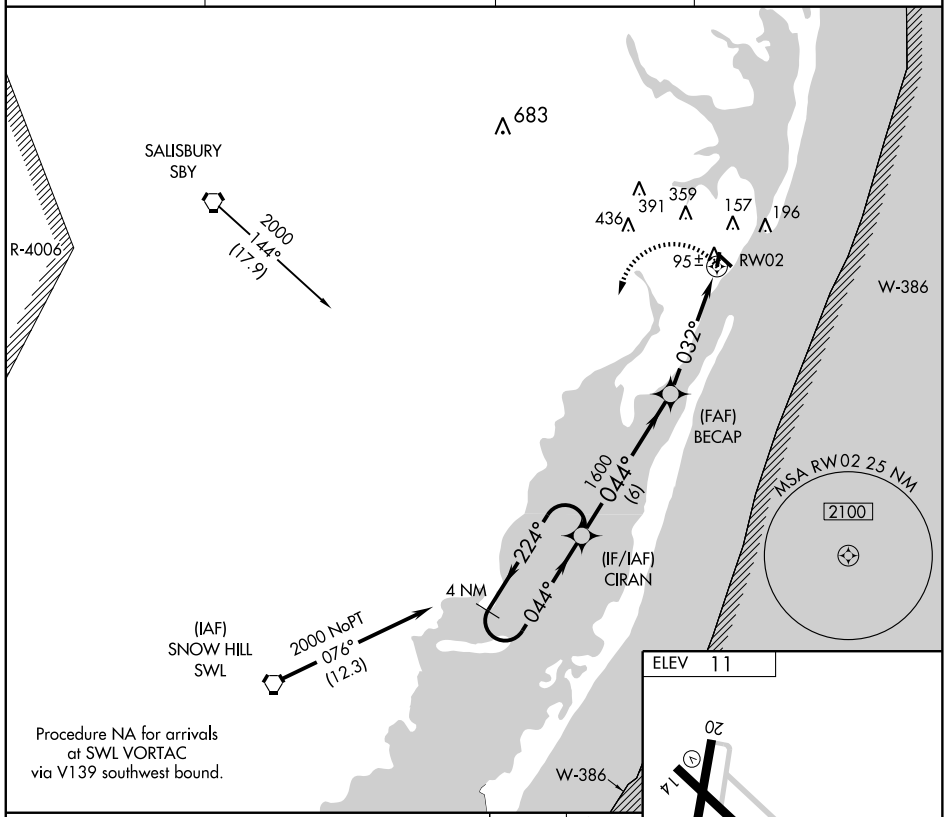
OCEAN CITY MUNI (OXB)

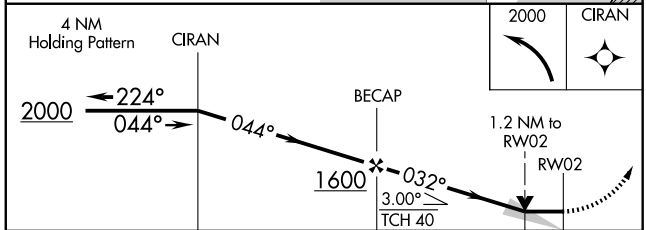
APP CRS	Rwy ldg	3201
032°	TDZE	11
	Apt Elev	11

If local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet. DME/DME RNP-0.3 NA. Procedure NA at night.

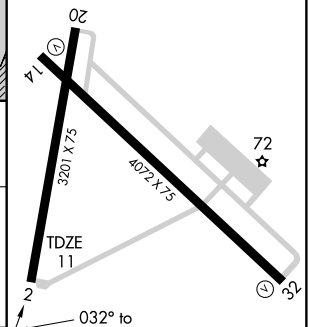
MISSED APPROACH: Climbing left turn to 2000 direct CIRAN and hold.

ASOS	PATUXENT APP CON ★	CLNC DEL	UNICOM
119.025	127.95 314.0	121.75	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	420 - 1	409 (500-1)	420 - 1¼ 409 (500-1¼)	NA
CIRCLING	480 - 1	469 (500-1)	660 - 1¾ 649 (700-1¾)	NA



MIRL Rwys 2-20 and 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

OCEAN CITY, MARYLAND

AL-5284 (FAA)

RNAV (GPS) RWY 14

OCEAN CITY MUNI (OXB)

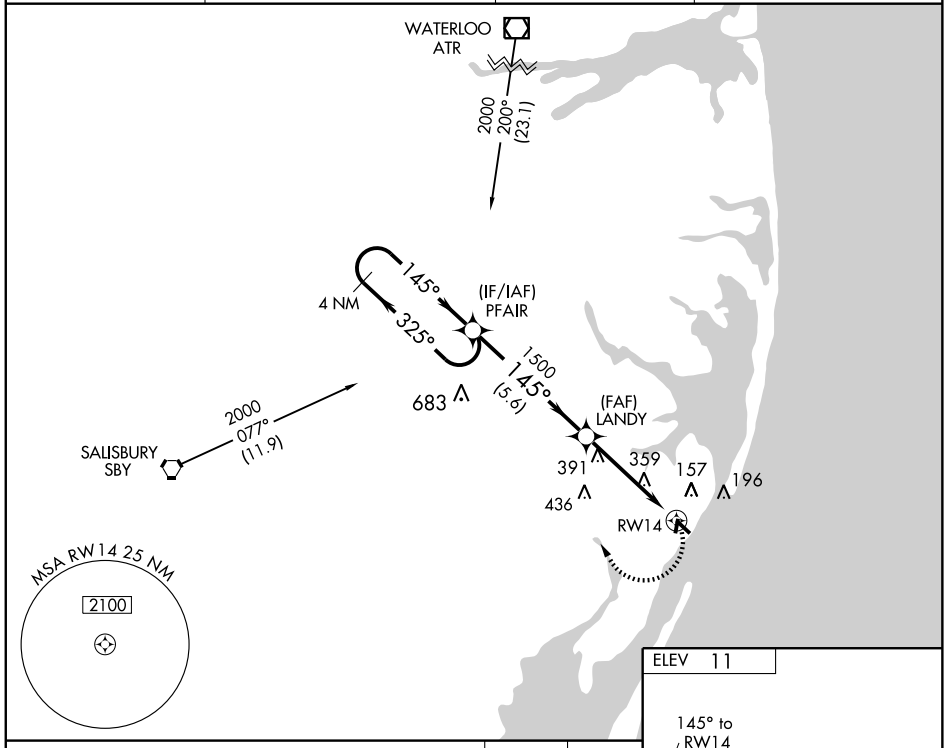
APP CRS	Rwy Idg	4072
145°	TDZE	11
	Apt Elev	11

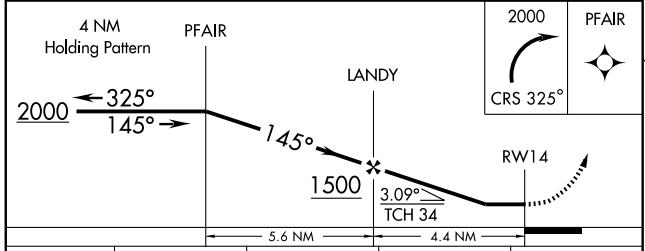
GPS or RNP -0.3 required.
DME/DME RNP -0.3 NA.

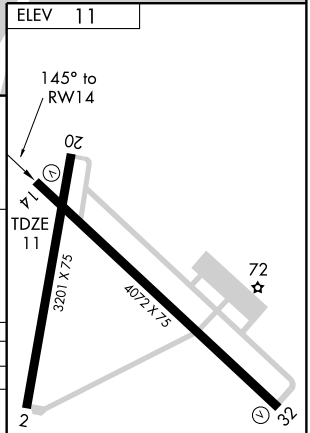
NA

MISSED APPROACH: Climbing right turn to 2000 via 325° course to PFAIR and hold.

ASOS	PATUXENT APP CON ★	CLNC DEL	UNICOM
119.025	127.95 314.0	121.75	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	NA			
LNAV/VNAV DA	NA			
LNAV MDA	700-1 689 (700-1)		700-2 689 (700-2)	700-2¼ 689 (700-2¼)
CIRCLING	700-1 689 (700-1)		700-2 689 (700-2)	720-2¼ 709 (800-2¼)

MIRL Rwys 2-20 and 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

OCEAN CITY, MARYLAND

AL-5284 (FAA)

RNAV (GPS) RWY 32

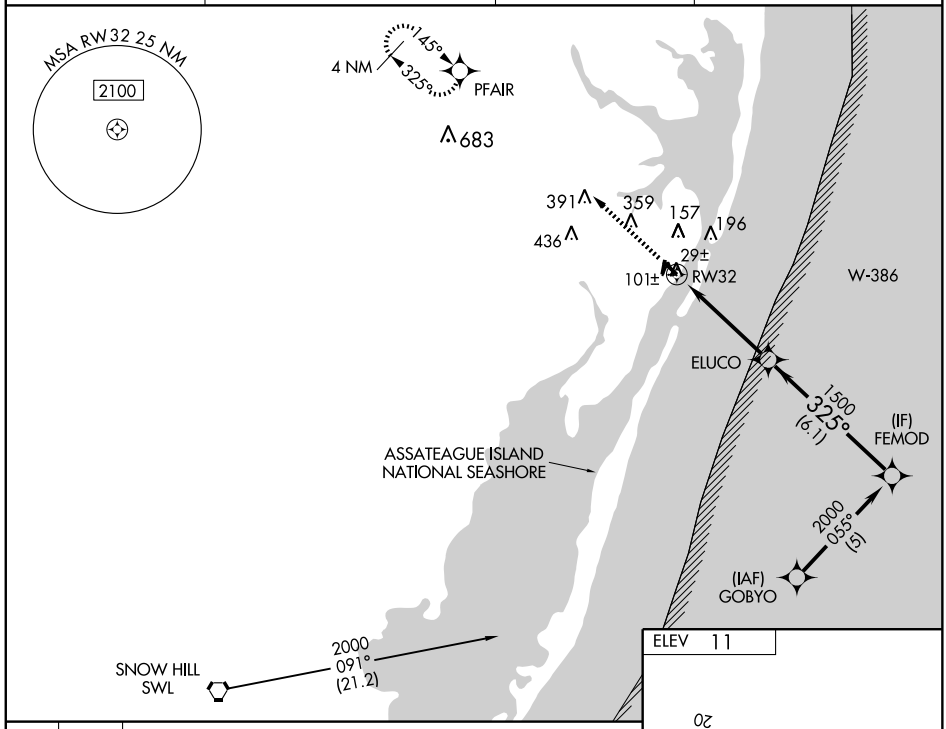
OCEAN CITY MUNI (OXB)

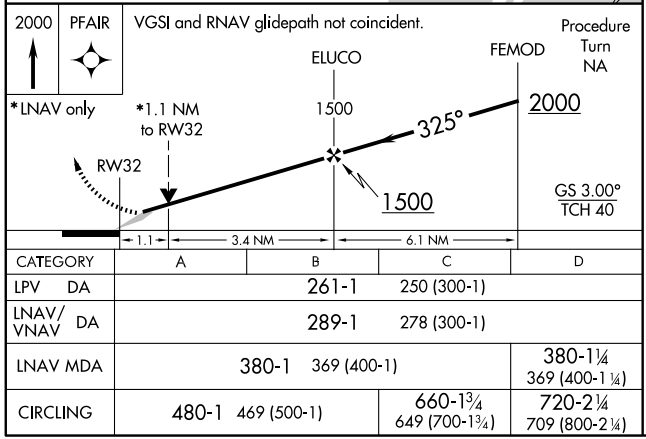
WAAS	APP CRS	Rwy ldg	4072
CH 40413	325°	TDZE	11
W32A		Apt Elev	11

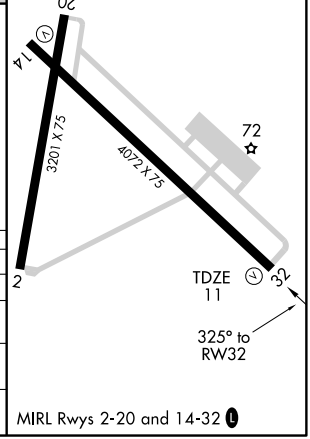
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 48°C (118°F). DME/DME RNP -0.3 NA. Baro-VNAV and VDP NA when using Salisbury altimeter setting. When local altimeter setting not received, use Salisbury altimeter setting and increase all DA 48 feet and all MDA 60 feet, increase LNAV/VNAV all Cats, LNAV Cats C/D and Circling Cats C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2000 direct PFAIR and hold.

ASOS	PATUXENT APP CON ★	CLNC DEL	UNICOM
119.025	127.95 314.0	121.75	123.05 (CTAF) L







CATEGORY	A	B	C	D
LPV DA		261-1	250 (300-1)	
LNAV/VNAV DA		289-1	278 (300-1)	
LNAV MDA	380-1	369 (400-1)		380-1¼ 369 (400-1¼)
CIRCLING	480-1 469 (500-1)		660-1¾ 649 (700-1¾)	720-2¼ 709 (800-2¼)

NE-3. 17 DEC 2009 to 14 JAN 2010

OCEAN CITY, MARYLAND

AL-5284 (FAA)

VORTAC SBY	APP CRS	Rwy Idg	N/A
111.2	108°	TDZE	N/A
Chan 49		Apt Elev	11

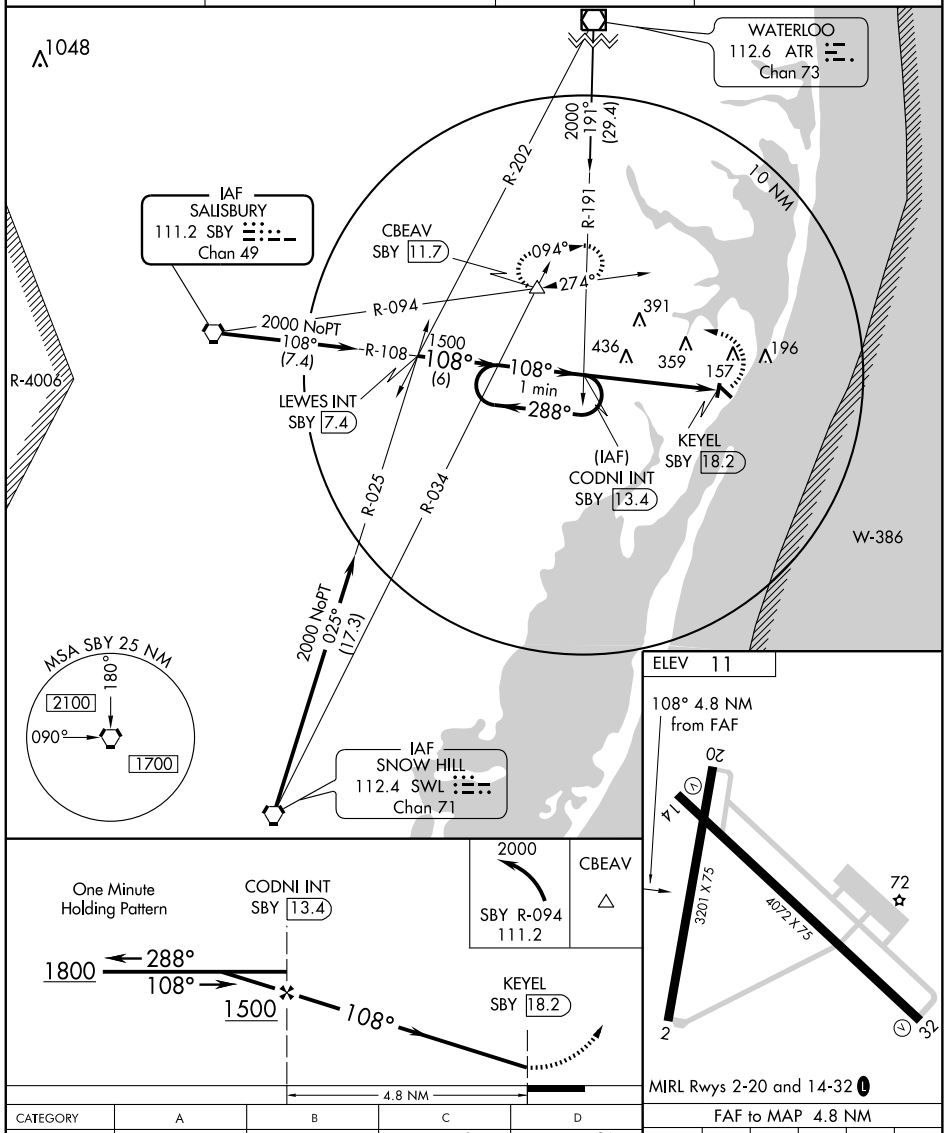
VOR-A

OCEAN CITY MUNI (OXB)

When local altimeter setting not received, use Salisbury altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing left turn to 2000 via SBY R-094 to CBEAV Int/11.7 DME and hold.

ASOS	PATUXENT APP CON ★	CLNC DEL	UNICOM
119.025	127.95 314.0	121.75	123.05 (CTAF) L

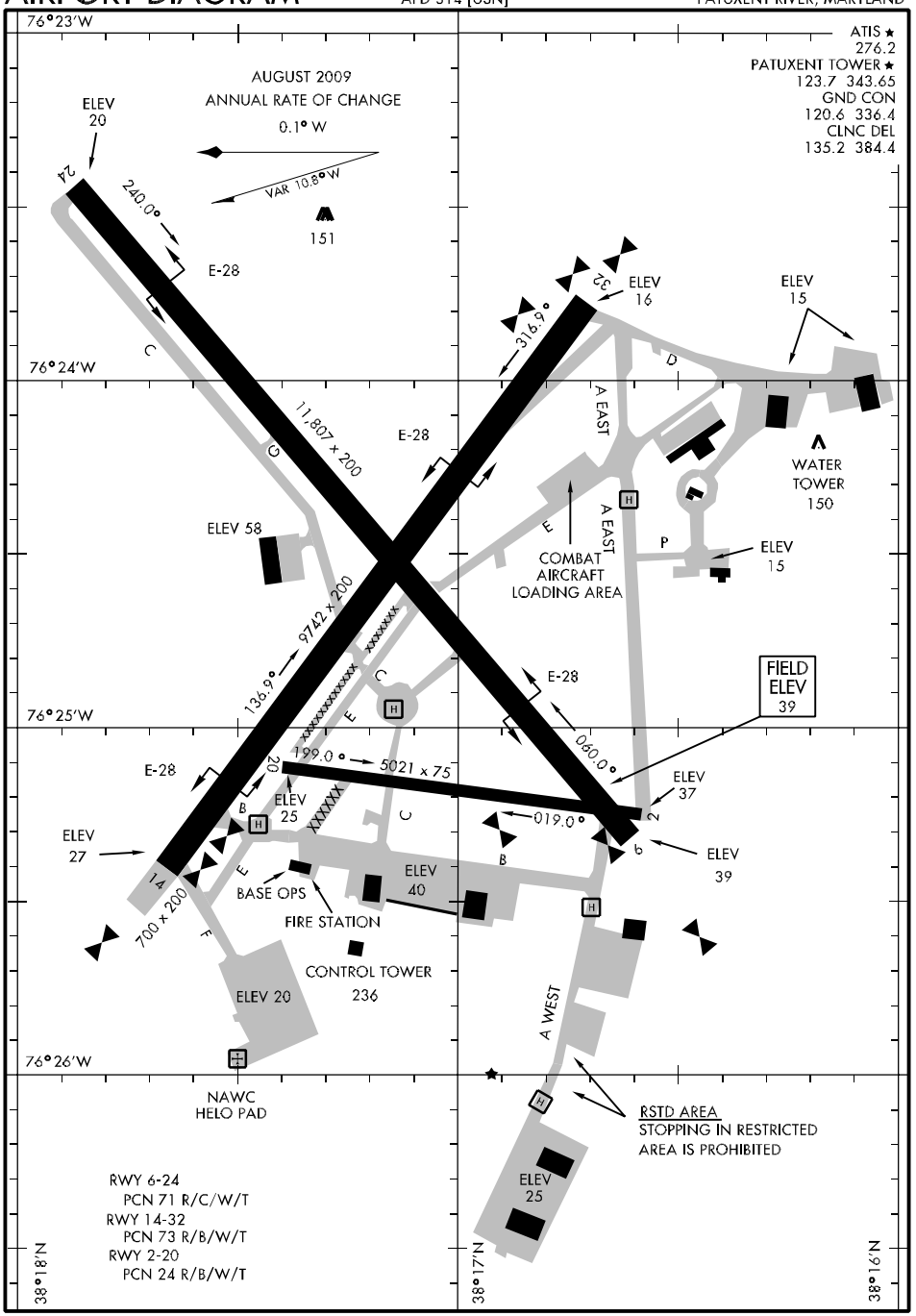


CATEGORY	A	B	C	D
CIRCLING	860-1 849 (900-1)	860-1¼ 849 (900-1¼)	860-2½ 849 (900-2½)	860-2¾ 849 (900-2¾)

FAF to MAP 4.8 NM

Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

NE-3. 17 DEC 2009 to 14 JAN 2010


76°23'W
76°24'W
76°25'W
76°26'W
38°18'N
38°17'N
38°16'N
ATIS ★
276.2
PATUXENT TOWER ★
123.7 343.65
GND CON
120.6 336.4
CLNC DEL
135.2 384.4
AUGUST 2009
ANNUAL RATE OF CHANGE
0.1° W
VAR 10.8°W
151
ELEV 20
24
240.0°
E-28
C
11,807 x 200
316.9°
32
ELEV 16
ELEV 15
D
A EAST
WATER TOWER 150
ELEV 58
E-28
E
COMBAT AIRCRAFT LOADING AREA
P
ELEV 15
9742 x 200
136.5°
XXXXXXXXXXXXXXXXXXXXXX
FIELD ELEV 39
060.0°
199.0°
5021 x 75
20
2
ELEV 37
ELEV 25
019.0°
ELEV 27
14
700 x 200
F
BASE OPS
FIRE STATION
ELEV 40
ELEV 39
CONTROL TOWER
236
ELEV 20
A WEST
NAWC HELO PAD
RSTD AREA
STOPPING IN RESTRICTED AREA IS PROHIBITED
ELEV 25
RWY 6-24
PCN 71 R/C/W/T
RWY 14-32
PCN 73 R/B/W/T
RWY 2-20
PCN 24 R/B/W/T

HI-TACAN RWY 6

VORTAC PXT	APCH CRS	Rwy ldg 11,807
117.6	065°	TDZE 39
Chan 123		Arpt Elev 39

JAL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

* When ALS inop, increase vis CAT C to 1¼ miles, CAT D to 1½ miles, CAT E to 1¾ .
** When ALS inop, increase vis to ½ mile.

ALSF-1

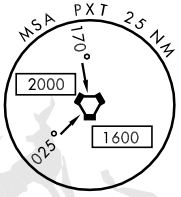
MISSED APPROACH: Climb to 2500 direct PXT VORTAC, then via PXT R-050 to SPRIG and hold.

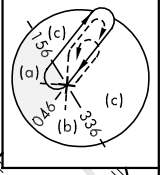
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

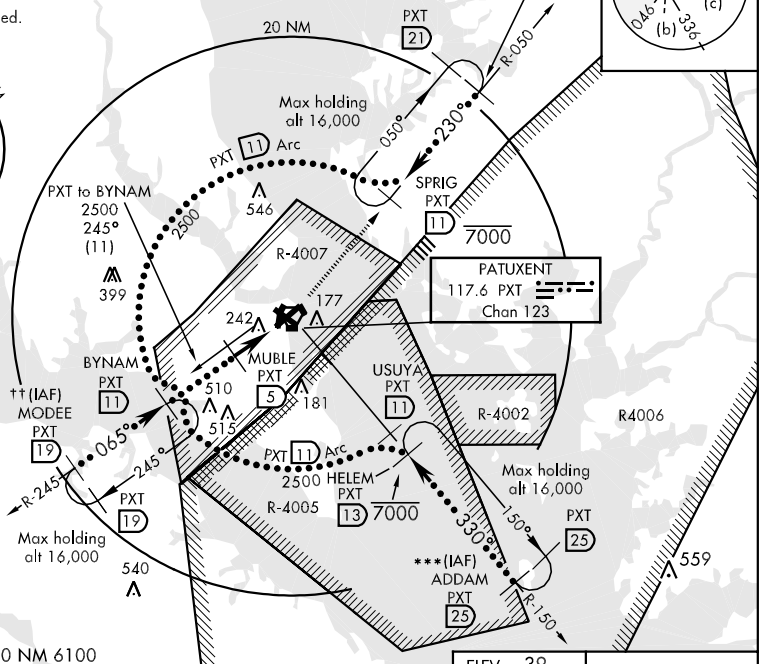
*** For LOCAL USE ONLY 15,000 or as assigned.

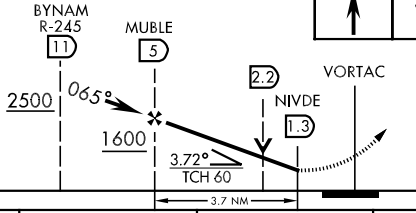
†12,000 or as assigned.

††10,000 or as assigned.

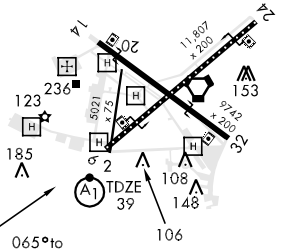








ELEV 39



CATEGORY	C	D	E
S-6 *	500- ¾	500-1	500-1¼
	461 (500-¾)	461 (500-1)	461 (500-1¼)
CIRCLING	560-1½	600-2	640-2¼
	521 (600-1½)	561 (600-2)	601 (700-2¼)
S-PAR 6 **	139-¼	100 (100-¼)	GS 3.0°

HIRL all Rwys

HI-TACAN RWY 14

VORTAC PXT	APCH CRS	Rwy Idg	9472
117.6	127°	TDZE	27
Chan 123		Arpt Elev	39

JAL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

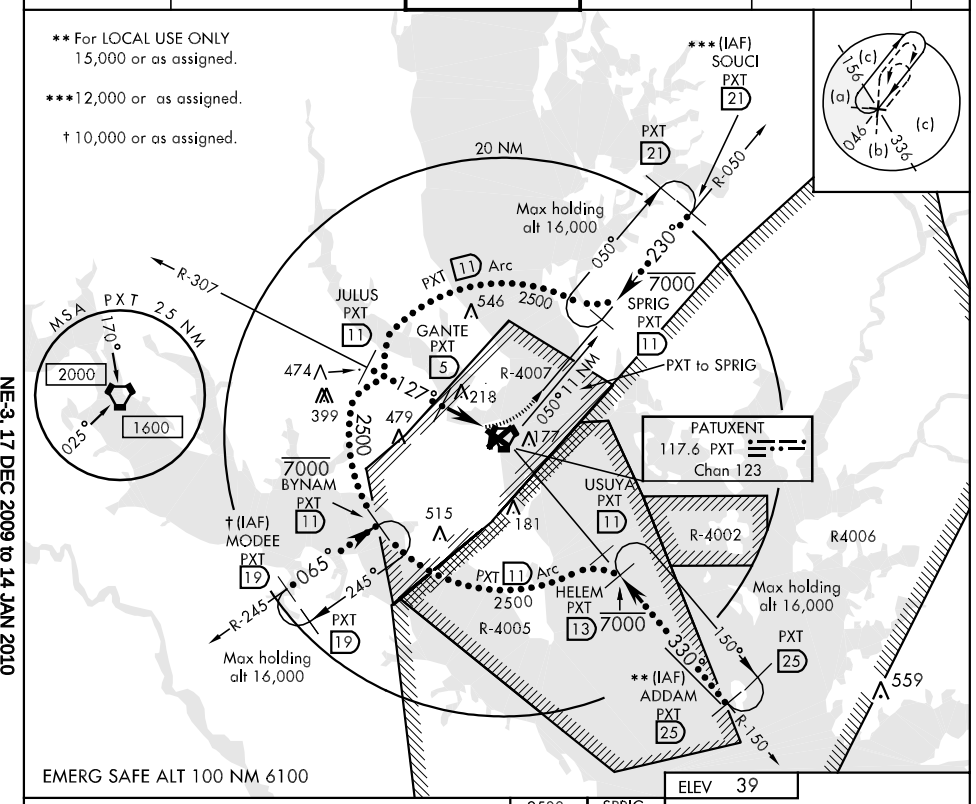
MISSED APPROACH: Climbing left turn to 2500, intercept the PXT R-050 to SPRIG and hold.

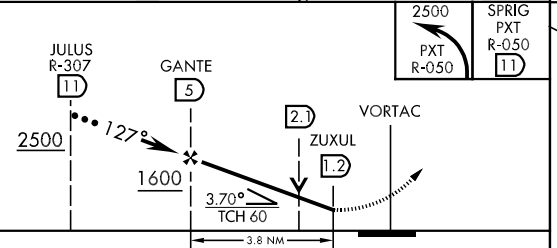
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

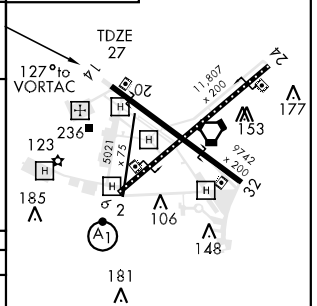
** For LOCAL USE ONLY
15,000 or as assigned.

***12,000 or as assigned.

† 10,000 or as assigned.







CATEGORY	C	D	E
S-14	480-1¼ 453 (500-1¼)	480-1½ 453	(500-1½)
CIRCLING	560-1½ 521 (600-1½)	600-2 561 (600-2)	640-2¼ 601 (700-2¼)
S-PAR 14	127-½	100 (100-½)	GS 3.0°

HIRL Rwy 14-32, 6-24

HI-TACAN RWY 24

VORTAC PXT	APCH CRS	Rwy ldg 11,807	JAL-314 [USN]	PATUXENT RIVER NAS (TRAPNELL FIELD)	(KNHK)
117.6 Chan 123	230°	TDZE 20 Arpt Elev 39			

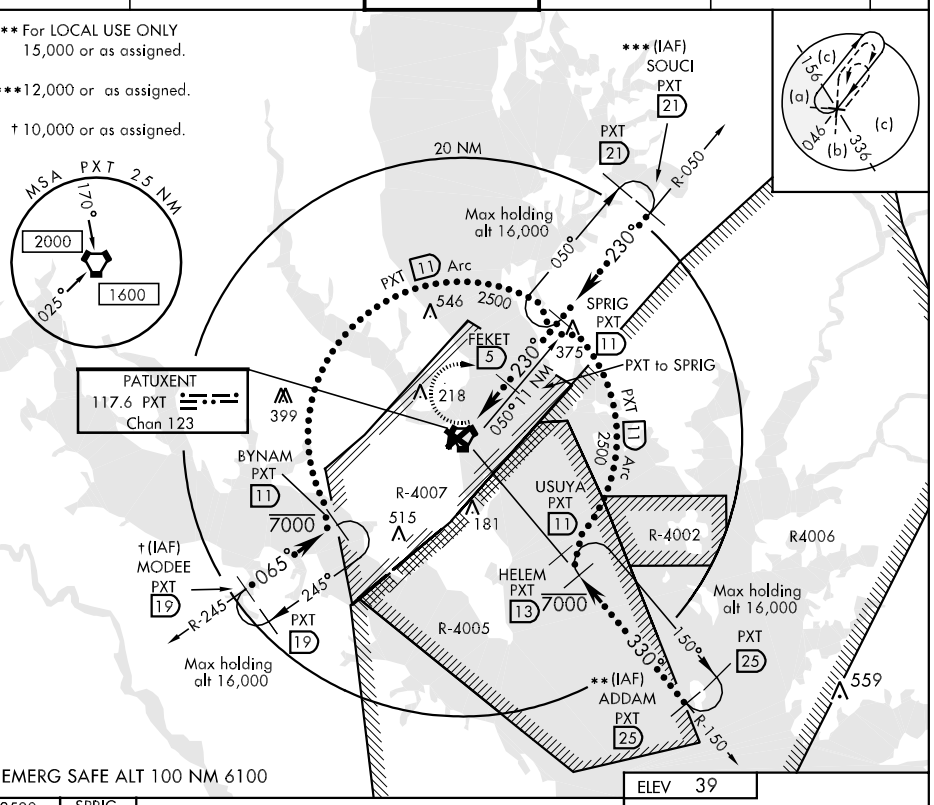
MISSED APPROACH: Climing right turn to 2500, intercept PXT R-050 to SPRIG and hold.

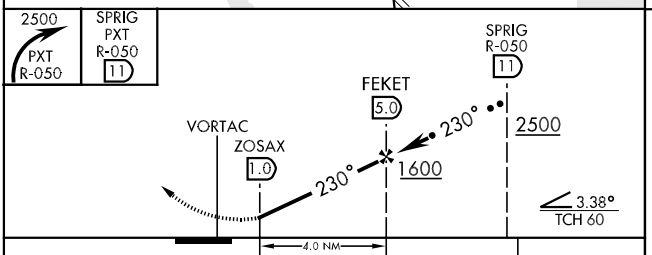
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

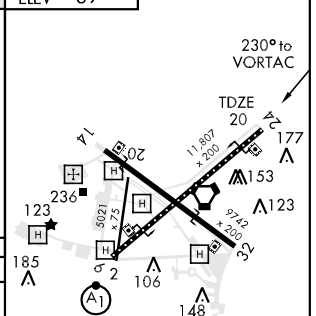
** For LOCAL USE ONLY
15,000 or as assigned.

***12,000 or as assigned.

† 10,000 or as assigned.







CATEGORY	C	D	E
S-24	440-1¼ 420 (500-1¼)		440-1½ 420 (500-1½)
CIRCLING	560-1½ 521 (600-1½)	600-2 561 (600-2)	640-2¼ 601 (700-2¼)
S-PAR 24	120-½	100 (100-½)	GS 3.0°

HIRL Rwy 14-32, 6-24

HI-TACAN RWY 32

VORTAC PXT	APCH CRS	Rwy Idg	9742
117.6	330°	TDZE	18
Chan 123		Arpt Elev	39

JAL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

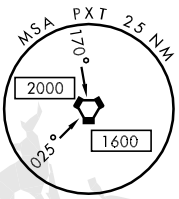
MISSED APPROACH: Climb to 500, then climbing right turn to 2500, intercept PXT R-150 to HELEM and hold.

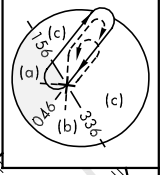
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

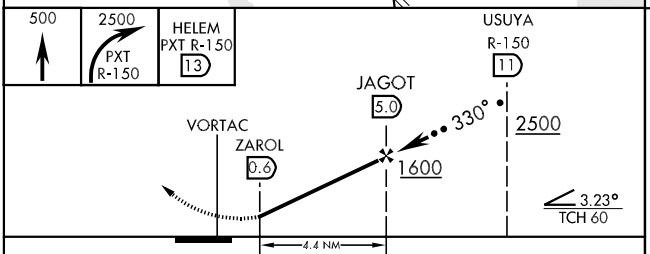
** For LOCAL USE ONLY
15,000 or as assigned.

***12,000 or as assigned.

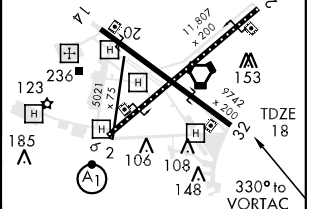
† 10,000 or as assigned.







ELEV 39



HIRL Rwy 14-32, 6-24

CATEGORY	C	D	E
S-32	400-1 382 (400-1)	400-1¼ 382 (400-1¼)	
CIRCLING	560-1½ 521 (600-1½)	600-2 561 (600-2)	640-2¼ 601 (700-2¼)
S-PAR 32	268-1	250 (300-1) GS 3.0°	

NDB/DME RWY 6

NDB NHK	APCH CRS	Rwy ldg	11,807
400	066°	TDZE	39
		Arpt Elev	39

AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

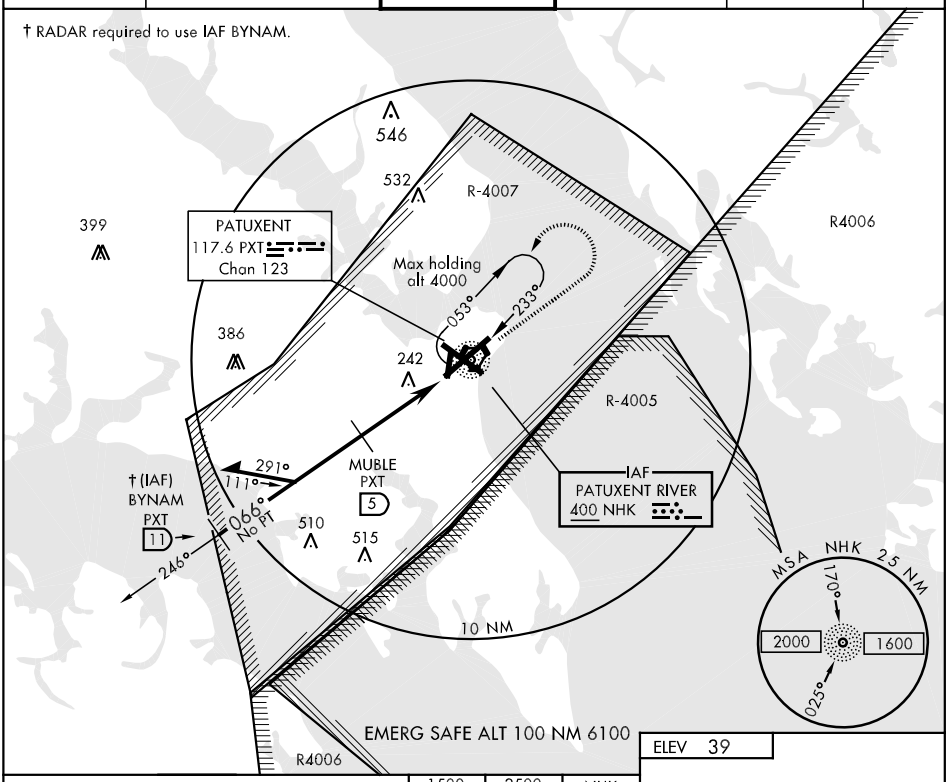
▼ * When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.
** When ALS inop, increase vis CAT ABCD to ½ mile.

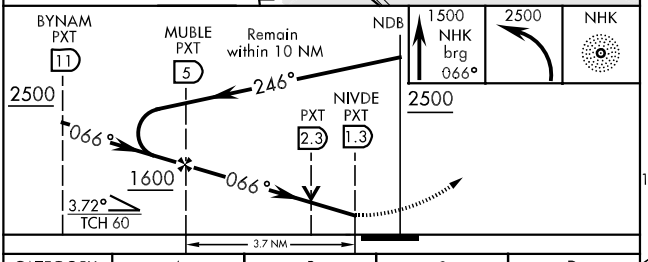
ALSF-1

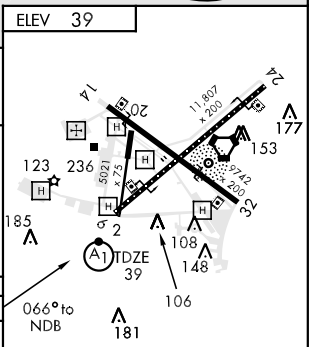
MISSED APPROACH: Climb to 1500 via NHK 066° bearing, then climbing left turn to 2500 direct NHK NDB and hold.

ATIS *	PATUXENT APP/DEP CON	PATUXENT TOWER *	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

† RADAR required to use IAF BYNAM.







CATEGORY	A	B	C	D
S-6 *	560-½ 521	(600-½)	560-1 521 (600-1)	560-1¼ 521 (600-1¼)
CIRCLING	560-1 521	(600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 6 **	139-¼ 100		(100-¼) GS 3.0°	

HIRL Rwy 14-32, 6-24

FAF to MAP 3.7 NM					
Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

RNAV (GPS) RWY 6

APCH CRS	Rwy ldg	11,807
059°	TDZE	39
	Arpt Elev	39

AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD)(KNHK)

▼ * When ALS inop, increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.
** When ALS inop, increase vis CAT ABCD to 1¾ miles.
*** When ALS inop, increase vis to ½ mile.

ALSF-1 (A1)

MISSED APPROACH: Climb to 2500 direct SPRIG and hold.

ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

For uncompensated BARO VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (108°F).

DME/DME RNP-0.3 NA.

546 399 386 R-4007 R4006 R-4005

SPRIG 050° 230°

MSA RW6 25 NM 2000

RW06 242 ITIBE 2500 240° (11.8) PXT to WETUT

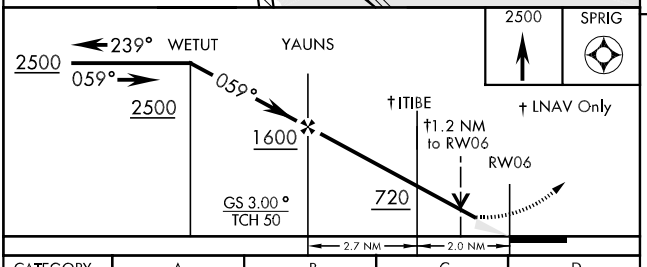
(FAF) YAUNS 059° 1600 059° (5.9) 510 515

(IAF) WETUT

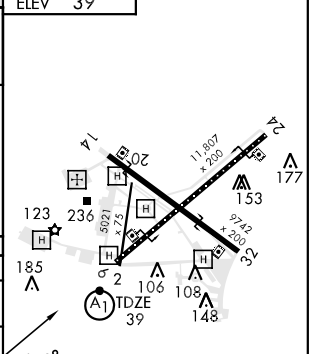
Max holding alt 8000 059° 239° 6 NM

PATUXENT 117.6 PXT Chan 123

EMERG SAFE ALT 100 NM 6100



CATEGORY	A	B	C	D
LNAV MDA*	460-½ 421 (500-½)		460-¾ 421 (500-¾)	460-1 421 (500-1)
LNAV/VNAV DA **	540-1¼ 501 (600-1¼)			
CIRCLING	540-1¾ 501 (600-1¾)	560-1¾ 521 (600-1¾)		600-2 561 (600-2)
S-PAR 6***	139-¼ 100 (100-¼) GS 3.00°			



NE-3, 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 14

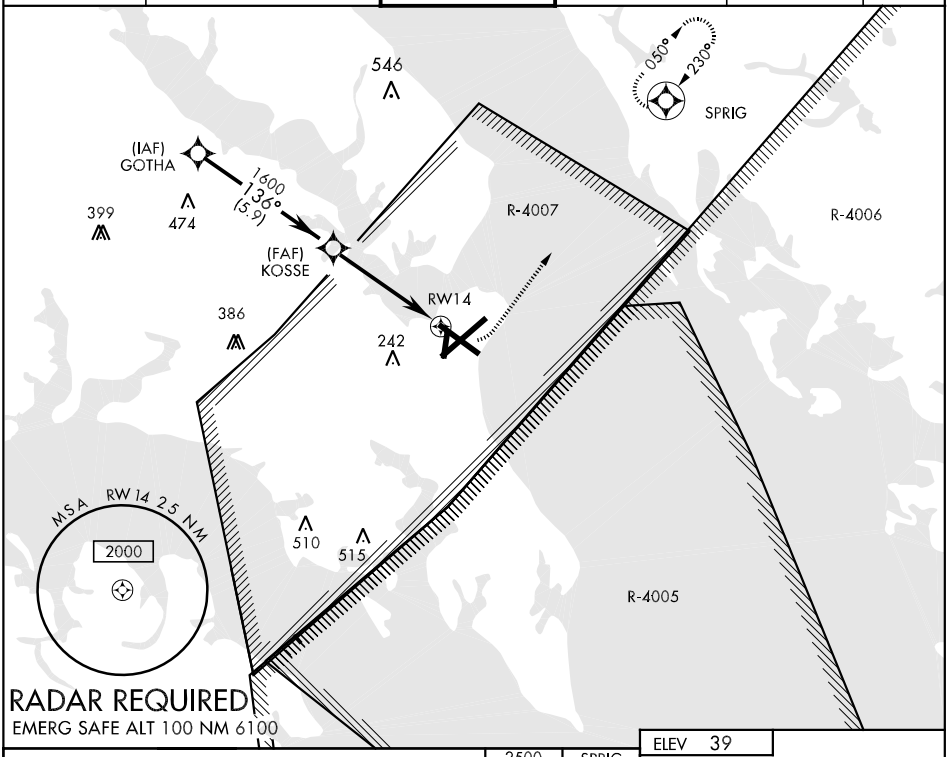
APCH CRS	Rwy Idg	TDZE	Arpt Elev
136°	9742	27	39

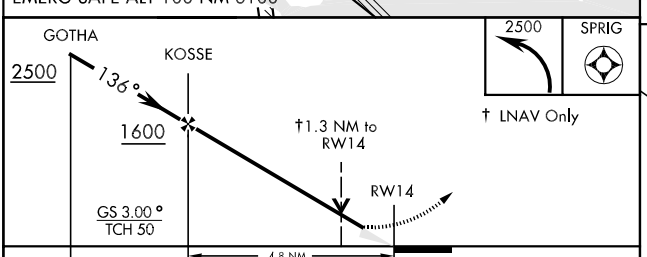
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD)(KNHK)

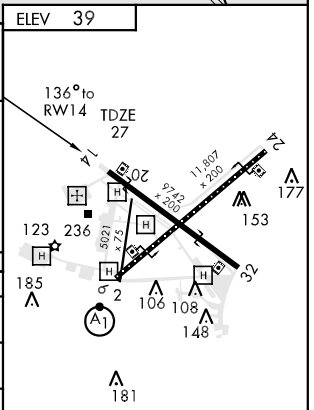
For uncompensated BARO VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (108°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 2500 direct SPRIG and hold.

ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	







CATEGORY	A	B	C	D
LNAV/ VNAV DA	400-1 373 (400-1)			400-1¼ 373 (400-1¼)
LNAV MDA	500-1 473 (500-1)		500-1¼ 473 (500-1¼)	500-1½ 473 (500-1½)
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 14	127-¼ 100 (100-½) GS 3.00°			

HIRL Rwy 14-32, 6-24

RNAV (GPS) RWY 24

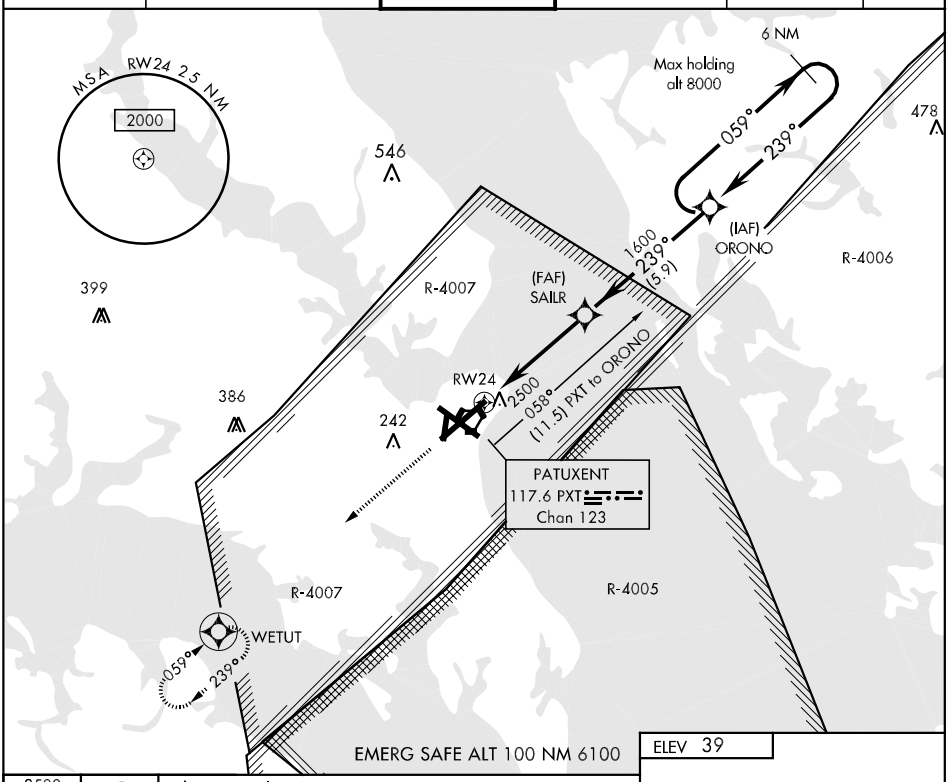
APCH CRS	Rwy ldg	11,807
239°	TDZE	20
	Arpt Elev	39

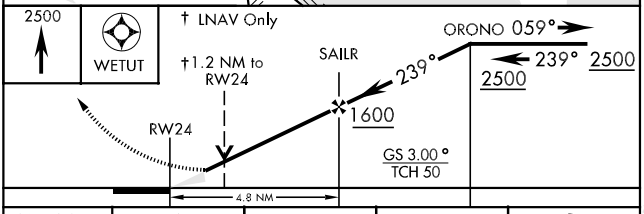
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

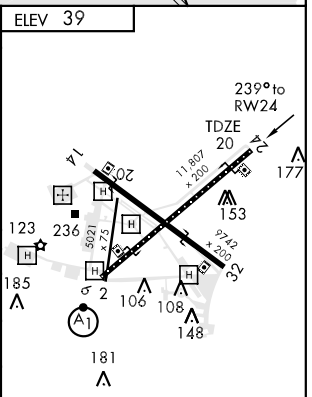
For uncompensated BARO VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 42°C (108°F). DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2500 direct WETUT and hold.

ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	







CATEGORY	A	B	C	D
LNAV/ VNAV DA	340-1 320 (400-1)			340-1¼ 320 (400-1¼)
LNAV MDA	440-1 420 (500-1)		440-1¼ 420 (500-1¼)	
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 24	120-½ 100 (100-½) GS 3.0°			

HIRL Rwy 14-32, 6-24

NE-3, 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 32

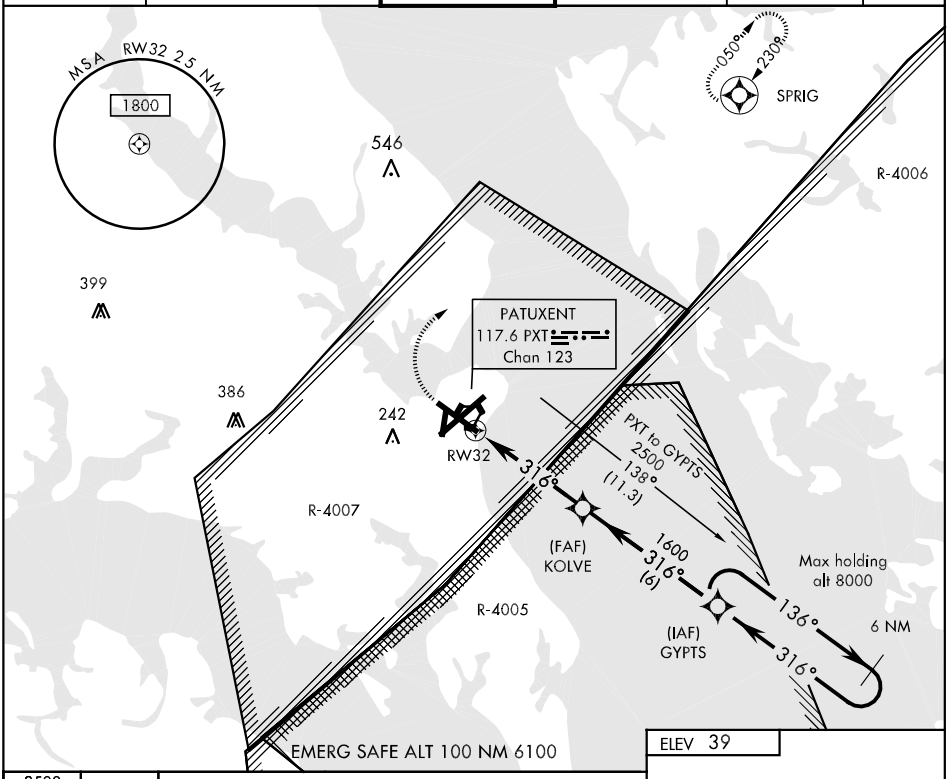
APCH CRS	Rwy ldg	9742
316°	TDZE	18
	Arpt Elev	39

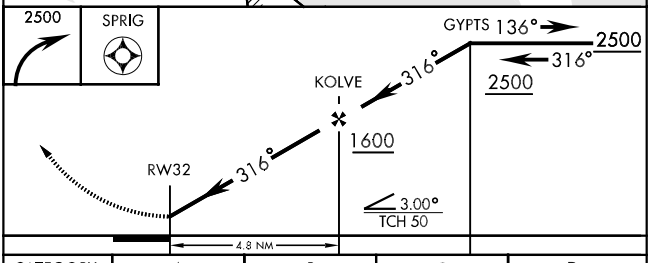
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

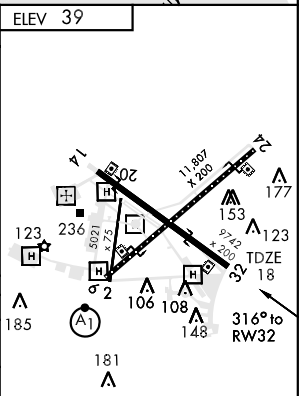
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2500 direct SPRIG and hold.

ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	



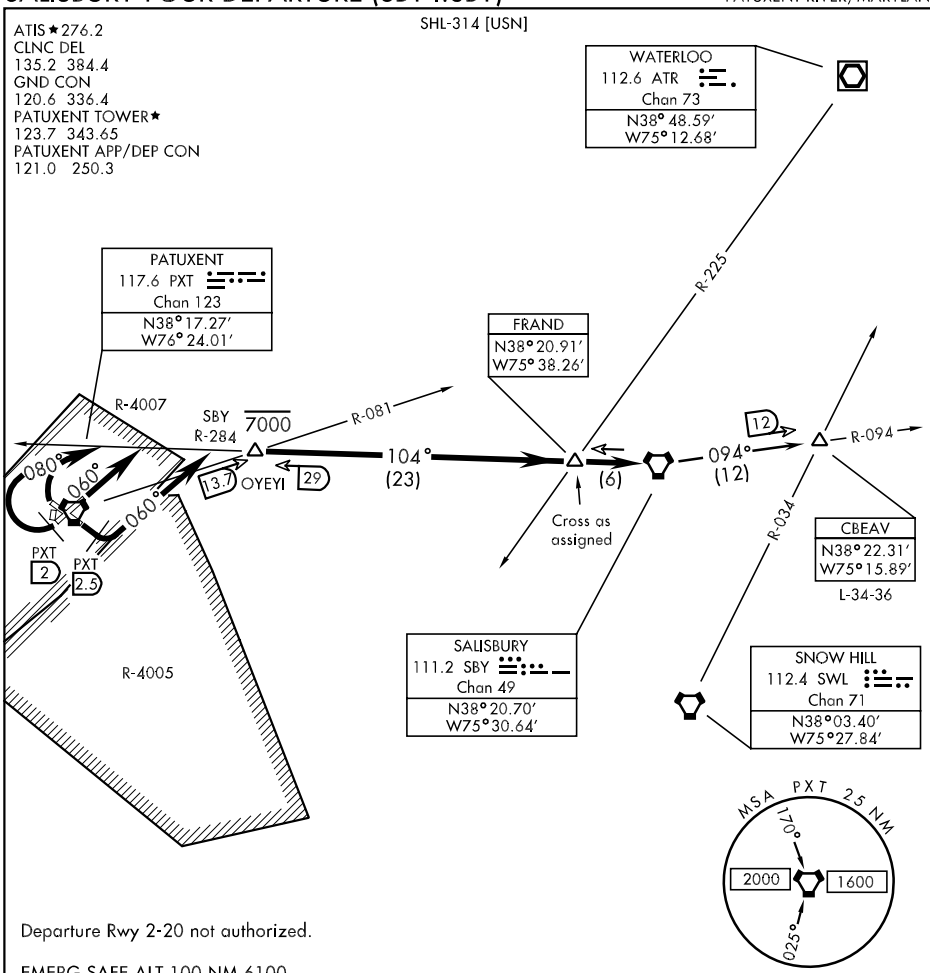




CATEGORY	A	B	C	D
LNAV MDA	420-1 402 (500-1)		420-1¼ 402 (500-1¼)	
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 32	268-1 250 (300-1) GS 3.0°			

HIRL Rwy 14-32, 6-24

SALISBURY-FOUR DEPARTURE (SBY4.SBY)



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RWY 6: Climb to 6000 via heading 060°, thence...

TAKE-OFF RWY 14: Climbing left turn to 6000 via heading 060° within PXT VORTAC 2.5 DME, thence...

TAKE-OFF RWY 24: Climb on heading 240° to PXT 2 DME, then climbing right turn to 6000 via heading 080°, thence...

TAKE-OFF RWY 32: Climbing right turn to 6000 via heading 080°, thence...

Intercept SBY VORTAC R-284, then via SBY R-284 to SBY. Cross FRAND as assigned. Then via assigned route or transition..

CBEAV TRANSITION (SBY4.CBEAV): Via SBY R-094 to CBEAV.

SALISBURY-FOUR DEPARTURE (SBY4.SBY)

PATUXENT RIVER, MARYLAND

SWABY-SIX DEPARTURE (SWABY6.SWABY)

ATIS ★276.2
CLNC DEL
135.2 384.4
GND CON
120.6 336.4
PATUXENT TOWER★
123.7 343.65
PATUXENT APP/DEP CON
121.0 250.3

SHL-314 [USN]

Rwy	Knots	60	120	180	240	300	360
ⓐ	V/V(fpm)	600	1200	1800	2400	3000	3600

ATC Climb Rate to 15,000.
ⓐ EDDYS trns only

Departure Rwy 2-20 not authorized.

Minimum filing alt 10,000'.

NOTTINGHAM
113.7 OTT
Chan 84
N38° 42.35'
W76° 44.69'

PATUXENT
117.6 PXT
Chan 123
N38° 17.27'
W76° 24.01'

CASANOVA
116.3 CSN
Chan 110
N38° 38.47'
W77° 51.93'
L-29-34-36, H-10

R-4007
180°
210°
250°
3

JUMIX
13

7000
ZIRAT
13

R-4005

R-131
311° (78)
R-223
203°
25

R-101
281° (78)

GORDONSVILLE
115.6 GVE
Chan 103
N38° 00.81'
W78° 09.18'
L-36, H-10

UNNAC

SWABY
N37° 52.88'
W76° 31.12'

V286

227° (44)
R-047
206° (28)
R-026

STEIN
L-35-36
R-323
21

UCINE

J61
184° (70)
R-211
30

HOPEWELL
112.0 HPW
Chan 57
N37° 19.73'
W77° 06.96'
L-34-36, H-10-12

CAPE CHARLES
112.2 CCV
Chan 59
N37° 20.85'
W75° 59.86'

OTT R-184
EDDYS
H-10

HARCUM
108.8 HCM
Chan 25
N37° 26.92'
W76° 42.68'
L-34-36, H-10-12

NORFOLK
116.9 ORF
Chan 116
N36° 53.52'
W76° 12.02'

MSA PXT 25 NM
170°
2000
1600
025°

ATC BRIEF
REQUIRED
135.2 384.4

TACAN REQUIRED

EMERG SAFE ALT 100 NM 6100

Chart not to scale

NE-3, 17 DEC 2009 to 14 JAN 2010

DEPARTURE ROUTE DESCRIPTION

TAKEOFF RWY 6: Climb to 3000 via heading 060°, at PXT VORTAC 3 DME turn left direct PXT, thence. . .

TAKE-OFF RWY 14: Climbing right turn to 3000 via heading 250° within PXT 2.5 DME, intercept PXT R-223, thence. . .

TAKE-OFF RWY 24: Climbing left turn to 3000 via heading 210°, intercept PXT R-223, thence. . .

TAKE-OFF RWY 32: Climbing left turn to 3000 via heading 180°, intercept PXT R-223, thence. . .

Via R-223 to JUMIX, PXT R-223/13 DME, then arc CCW SW of PXT via 13 mile arc to ZIRAT, PXT R-203/13 DME, then via PXT R-203 to SWABY, PXT R-203/25 DME, then via assigned transition or expect radar vectors to join assigned route. Cross ZIRAT at or below 7000.

CASANOVA TRANSITION (SWABY6.CSN): Via CSN VORTAC R-131 to CSN.

EDDYS TRANSITION (SWABY6.EDDYS): Via PXT R-203 to UCINE, then via OTT R-184 to EDDYS. Cross SWABY at or above 15,000.

GORDONSVILLE TRANSITION (SWABY6.GVE): Via GVE VORTAC R-101 to GVE.

HARCUM TRANSITION (SWABY6.HCM): Via HCM VORTAC R-026 to HCM.

HOPEWELL TRANSITION (SWABY6.HPW): Via HPW VORTAC R-047 to HPW.

STEIN TRANSITION (SWABY6.STEIN): Via PXT R-203 to UNNAC, then via CCV VORTAC R-323 to STEIN.

NE-3, 17 DEC 2009 to 14 JAN 2010

TACAN RWY 6

VORTAC PXT	APCH CRS	Rwy Idg 11,807
117.6	065°	TDZE 39
Chan 123		Arpt Elev 39

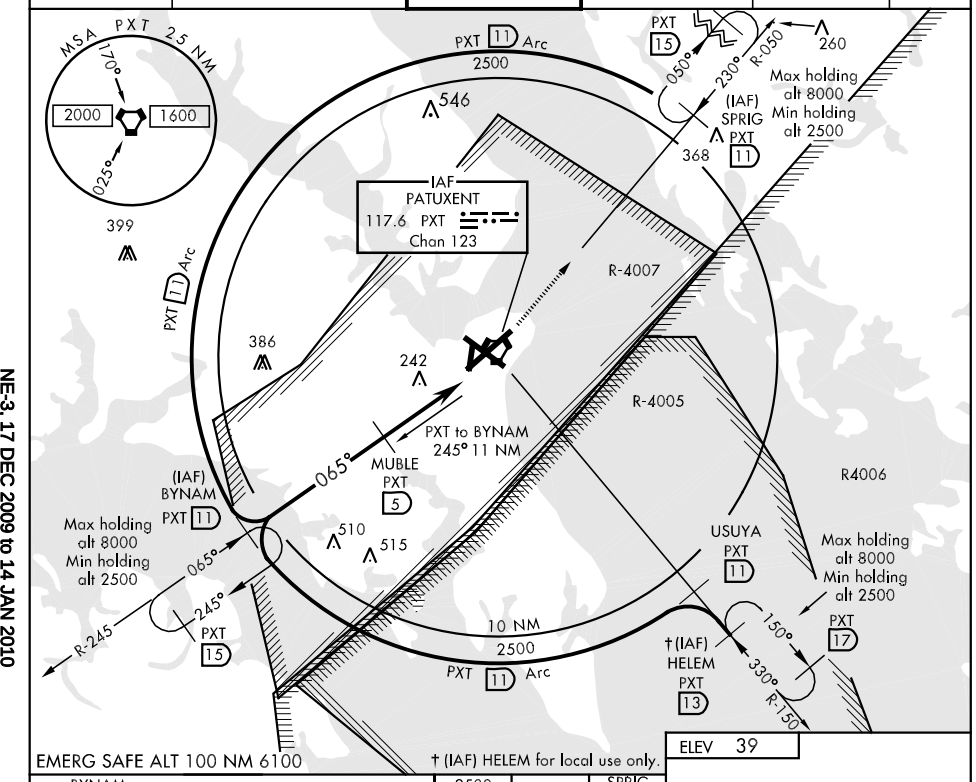
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

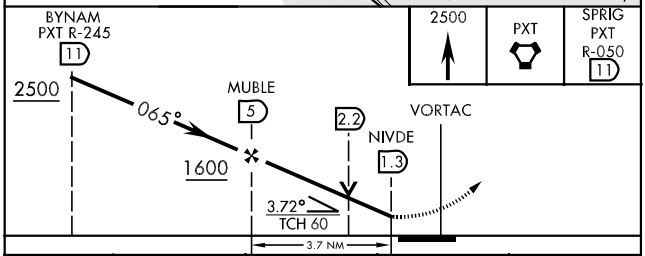
* When ALS inop increase vis CAT AB to 1 mile, CAT C to 1¼ miles, CAT D to 1½ miles.
** When ALS inop, increase vis CAT ABCD to ½ mile.

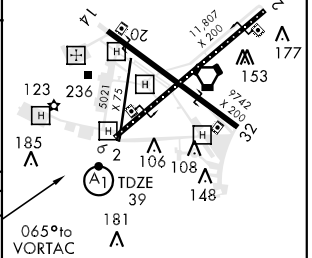
ALSF-1

MISSED APPROACH: Climb to 2500 direct PXT VORTAC, then via R-050 to SPRIG and hold.

ATIS *	PATUXENT APP/DEP CON	PATUXENT TOWER *	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	







CATEGORY	A	B	C	D
S-6 *	500-½	461 (500-½)	500-¾ 461 (500-¾)	500-1 461 (500-1)
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 6 **	139-¼	100	(100-¼) GS 3.0°	

HIRL Rwy 14-32, 6-24

NE-3, 17 DEC 2009 to 14 JAN 2010

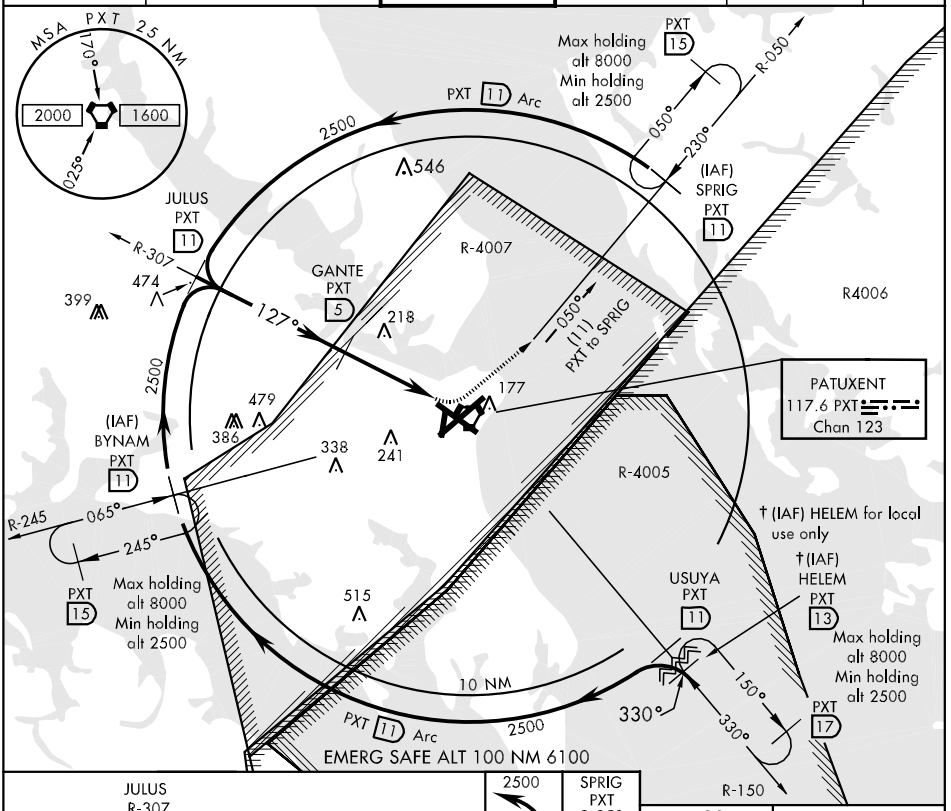
TACAN RWY 14

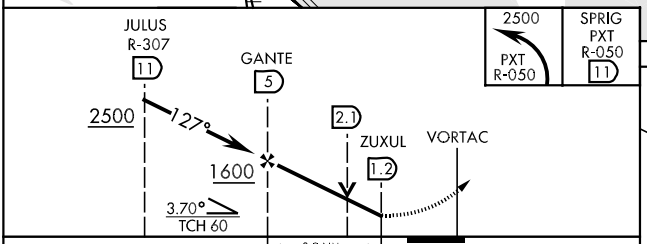
VORTAC PXT	APCH CRS	Rwy Idg	9742
117.6	127°	TDZE	27
Chan 123		Arpt Elev	39

AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

MISSED APPROACH: Climbing left turn to 2500 via PXT R-050 to SPRIG and hold.

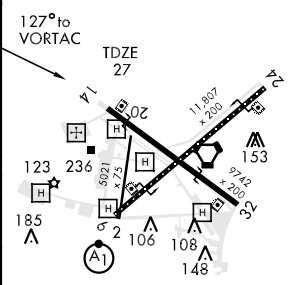
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	





CATEGORY	A	B	C	D
S-14	480-1 453 (500-1)		480-1¼ 453 (500-1¼)	480-1½ 453 (500-1½)
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 14	127-½	100	(100-½) GS 3.0°	

ELEV 39



HIRL Rwy 14-32, 6-24

TACAN RWY 32

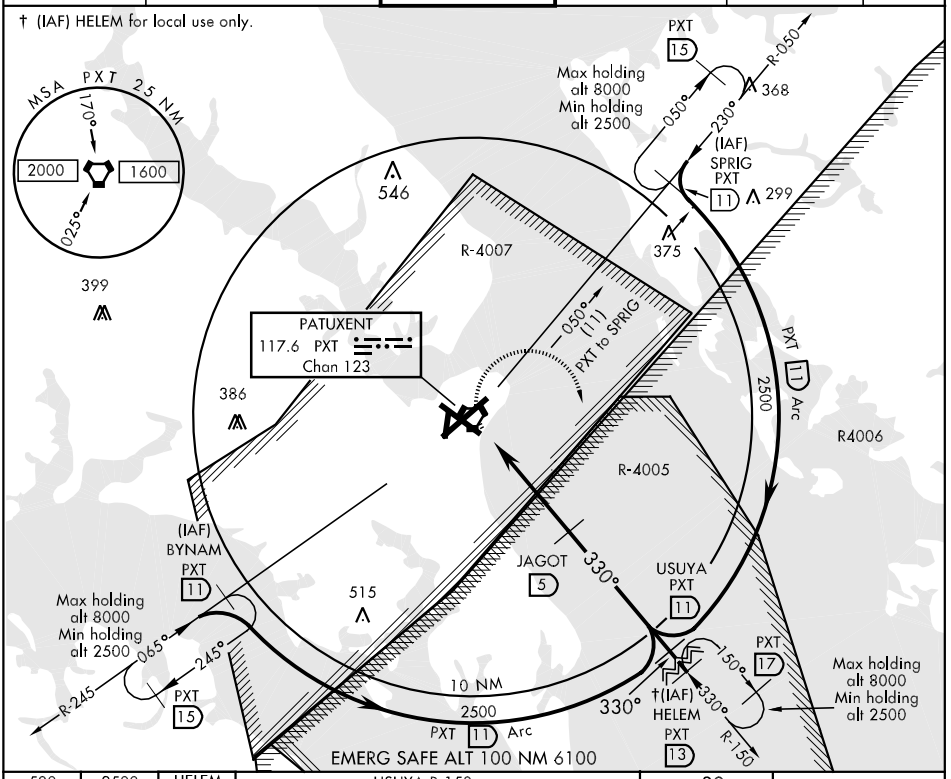
VORTAC PXT	APCH CRS	Rwy Idg	9742
117.6	330°	TDZE	18
Chan 123		Arpt Elev	39

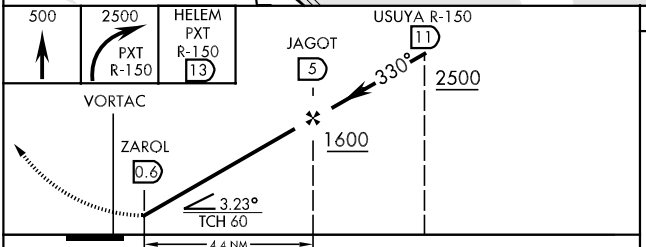
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD) (KNHK)

MISSED APPROACH: Climb to 500, then climbing right turn to 2500 to intercept the PXT R-150 to HELEM and hold.

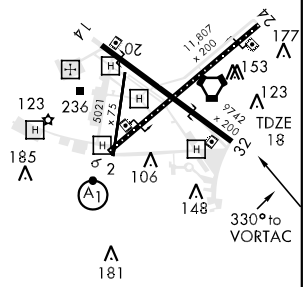
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

† (IAF) HELEM for local use only.





ELEV 39



CATEGORY	A	B	C	D
S-32	400-1 382 (400-1)			400-1¼ 382 (400-1¼)
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 32	268-1 250 (300-1) GS 3.0°			

HIRL Rwy 14-32, 6-24

VOR/DME or TACAN RWY 24

VORTAC PXT	APCH CRS	Rwy ldg	11,807
117.6	230°	TDZE	20
Chan 123		Arpt Elev	39

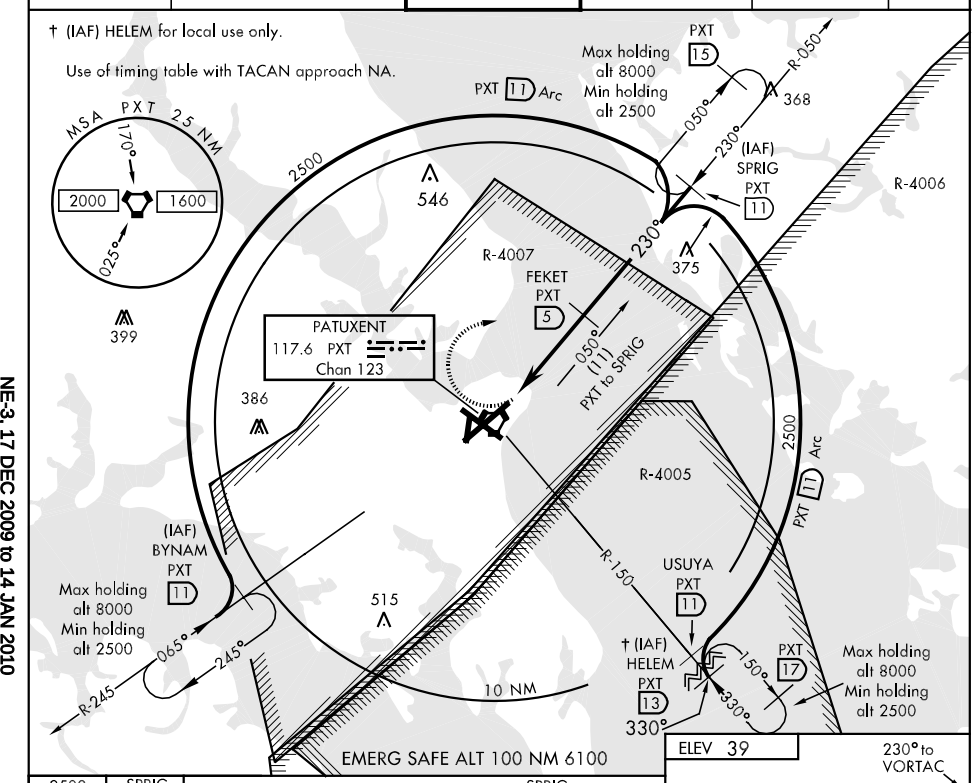
AL-314 [USN] PATUXENT RIVER NAS (TRAPNELL FIELD)(KNHK)

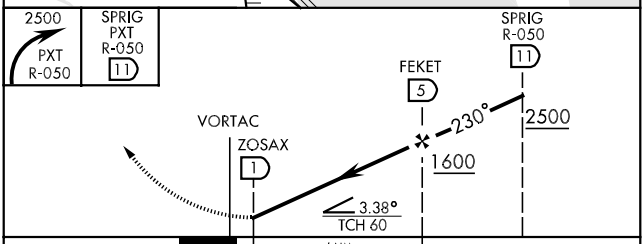
MISSED APPROACH: Climbing right turn to 2500, intercept the R-050 to SPRIG and hold.

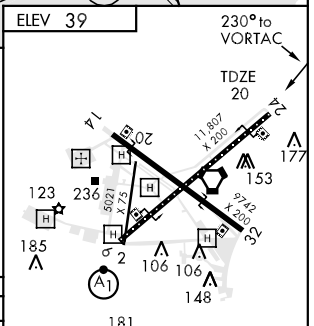
ATIS ★	PATUXENT APP/DEP CON	PATUXENT TOWER ★	GND CON	CLNC DEL	ASR/PAR
276.2	121.0 250.3	123.7 343.65	120.6 336.4	135.2 384.4	

† (IAF) HELEM for local use only.

Use of timing table with TACAN approach NA.







HIRL Rwy 14-32, 6-24

CATEGORY	A	B	C	D
S-24	440-1 420 (500-1)		440-1¼ 420 (500-1¼)	
CIRCLING	540-1 501 (600-1)	560-1 521 (600-1)	560-1½ 521 (600-1½)	600-2 561 (600-2)
S-PAR 24	120-½ 100 (100-½) GS 3.0 °			

FAF to MAP 4.0 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

RIDGELY, MARYLAND

AL-10248 (FAA)

RNAV (GPS) RWY 12

RIDGELY AIRPARK (RJD)

APP CRS	Rwy Idg	3214
121°	TDZE	64
	Apt Elev	64

▼ If local altimeter setting not received, procedure NA.
▲ NA Procedure NA at night.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct PEKME WP and hold.

AWOS-3	POTOMAC APP CON	UNICOM
120.225	124.55 317.425	122.8 (CTAF) L

Procedure NA for arrivals at PALEO via V93 northeast bound, V44 westbound, V312 southwest bound, V170-433 southwest bound.

BROSS

2000 252° (19.7)

Procedure NA for arrivals at BROSS via V268 eastbound.

(IAF) ANAYA

2000 211° (5)

(IAF) PALEO

2000 101° (12.9)

DAKEY

1700 121° (6.1)

(FAF) FIBNA

RW12

2000 054° (7.3)

526

(IAF) GRACO

Procedure NA for arrivals at GRACO via V379 southwest bound.

PEKME 4 NM 121° 301°

MSA RW12 25 NM

2100

2000 326° (15.6)

CHOPS

Procedure NA for arrivals at CHOPS via V308 eastbound.

ELEV 64

121° to RW12

13

3214 X 50

TDZE 64

30

2000 PEKME

Procedure Turn NA

DAKEY

2000

121°

FIBNA

1700

3.04° TCH 40

1 NM to RW12

RW12

6.1 NM 3.9 NM 1 NM

CATEGORY	A	B	C	D
LNAV MDA	440-1 376 (400-1)		NA	
CIRCLING	480-1 416 (500-1)	520-1 456 (500-1)	NA	

LIRL Rwy 12-30 L
REIL Rwy 12 and 30 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	3214
301°	TDZE	64
	Apt Elev	64

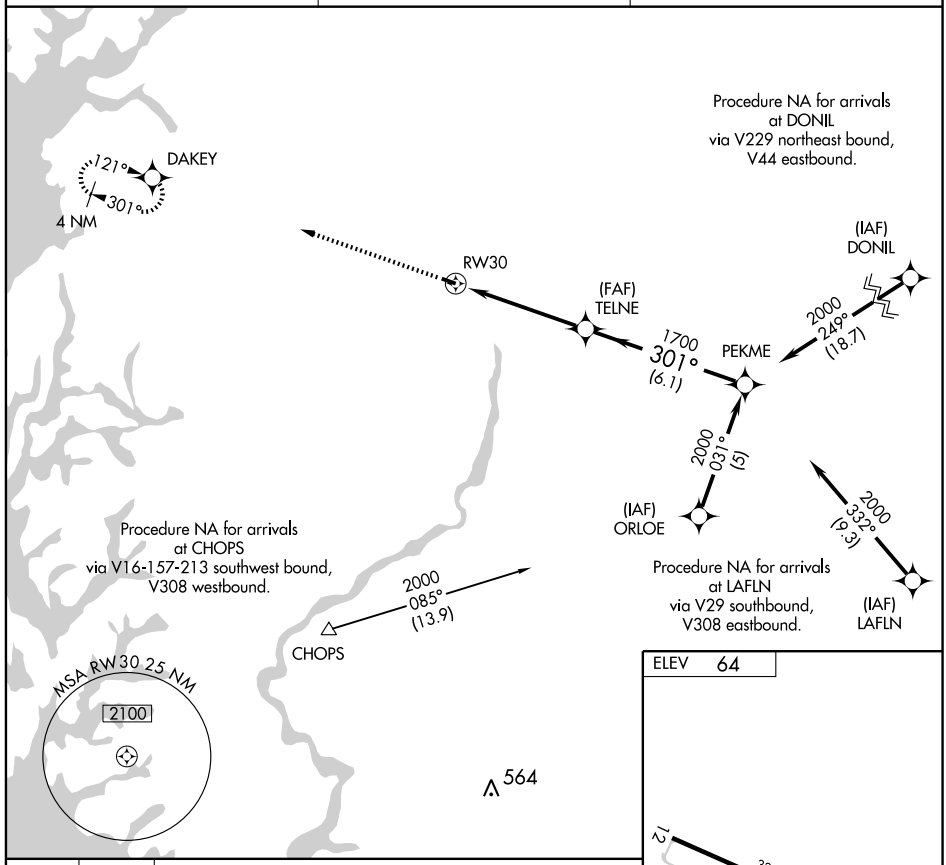
RNAV (GPS) RWY 30
RIDGELY AIRPARK (RJD)

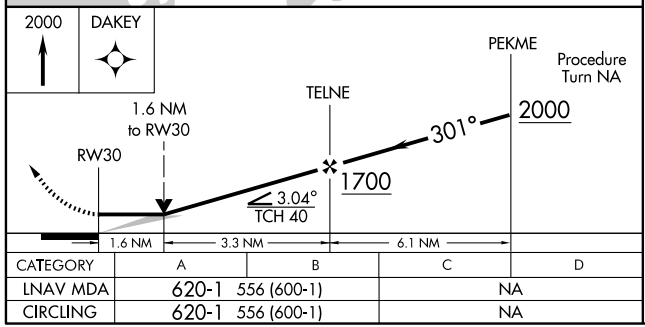
NA

If local altimeter setting not received, procedure NA.
Procedure NA at night.
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 direct DAKEY WP and hold.

AWOS-3	DOVER APP CON	UNICOM
120.225	132.425 257.875	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	620-1 556 (600-1)		NA	
CIRCLING	620-1 556 (600-1)		NA	

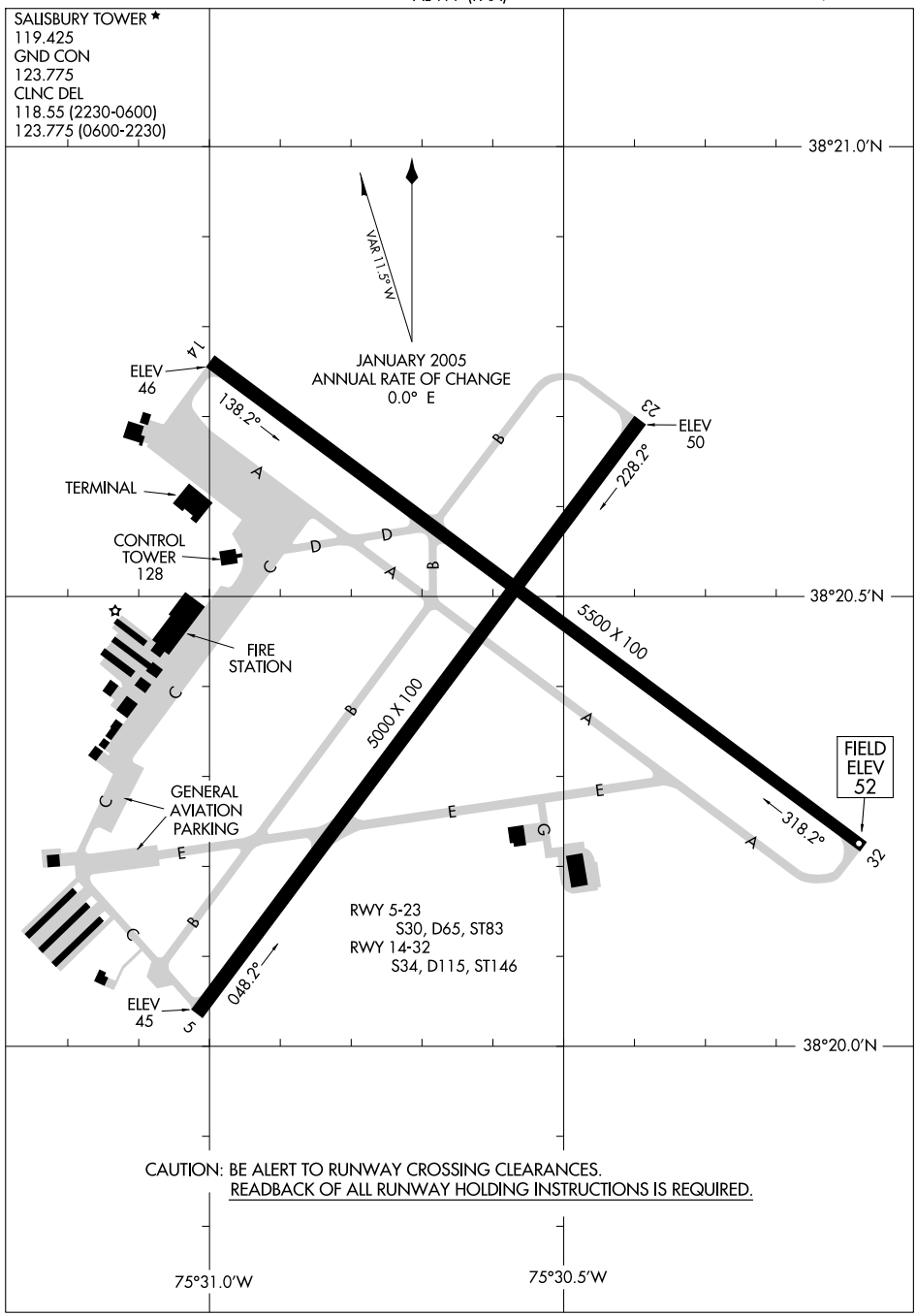
LIRL Rwy 12-30 L
REIL Rwy 12 and 30 L

NE-3, 17 DEC 2009 to 14 JAN 2010

07242

AIRPORT DIAGRAM

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)
SALISBURY, MARYLAND
AL-977 (FAA)



NE-3, 17 DEC 2009 to 14 JAN 2010

LOC I-SBY	APP CRS	Rwy Idg	5500
108.7	319°	TDZE	52
		Apt Elev	52

ILS or LOC RWY 32

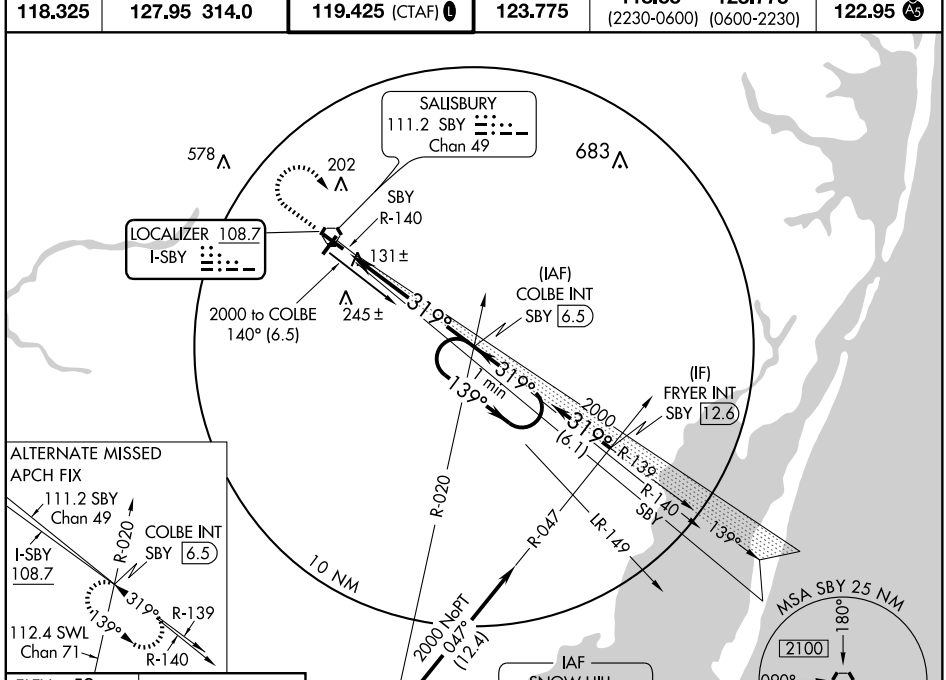
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

When local altimeter setting not received, use Georgetown altimeter setting and increase DA 52 feet and all MDA 60 feet, and increase S-LOC 32 Cat C visibility ¼ mile.

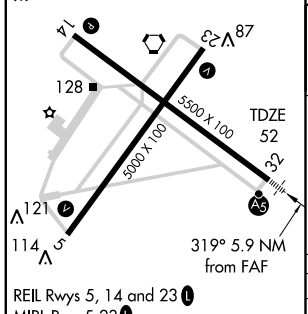
MALSR

MISSED APPROACH: Climb to 700, then climbing right turn to 2000 via heading 170° and SBY VORTAC R-140 to COLBE INT/SBY 6.5 DME and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 123.775 (2230-0600) (0600-2230)	122.95 A5

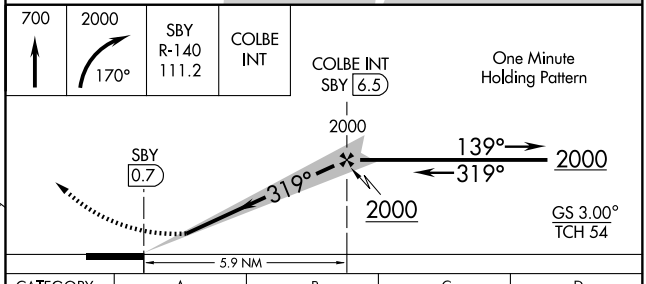


Procedure NA for arrivals at SWL VORTAC via V139 southwest bound.



REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L

FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58



CATEGORY	A	B	C	D
S-ILS 32	252-½ 200 (200-½)			
S-LOC 32	400-½ 348 (400-½)			400-¾ 348 (400-¾)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	5000
049°	TDZE	48
	Apt Elev	52

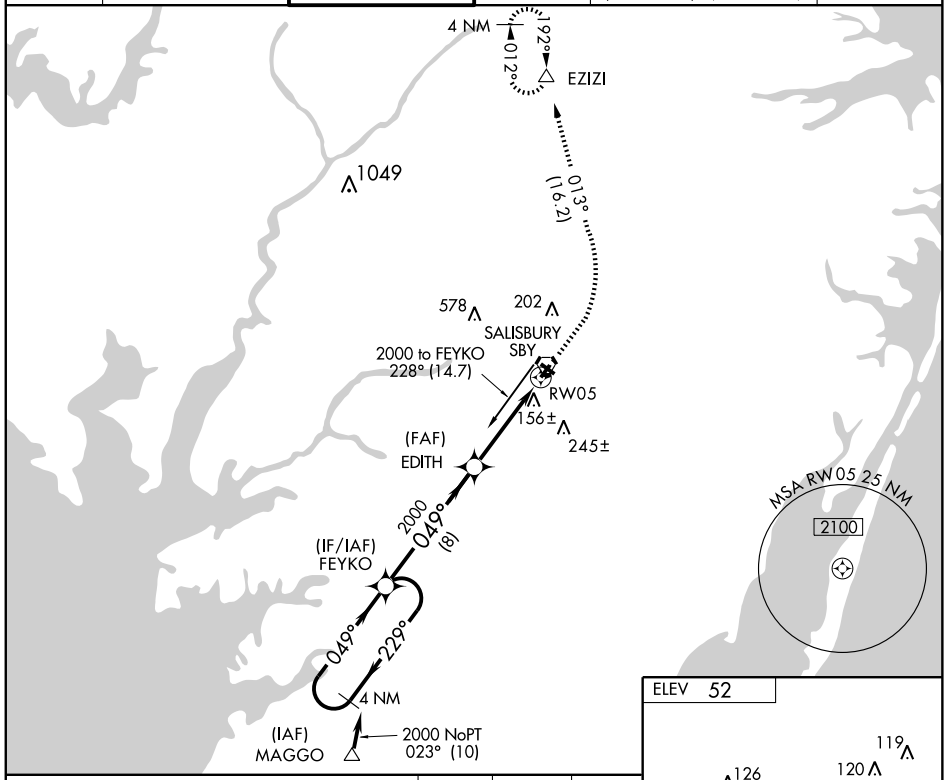
RNAV (GPS) RWY 5

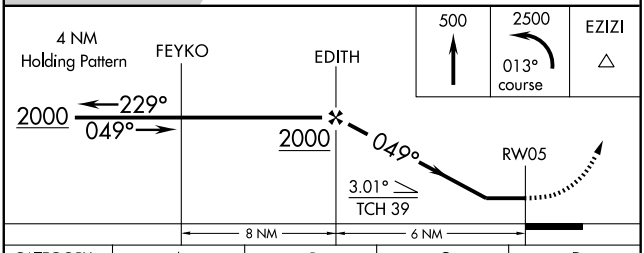
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

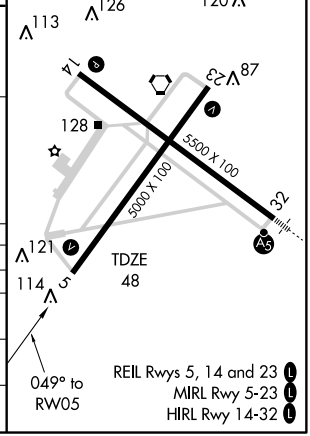
NA — GPS or RNP - 0.3 required. DME/DME RNP - 0.3 NA.

MISSED APPROACH: Climb to 500, then climbing left turn to 2500 via course 013° to EZIZI and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 (2230-0600) 123.775 (0600-2230)	122.95 A5







CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	NA			
LNAV	420-1 372 (400-1)			420-1¼ 372 (400-1¼)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

SALISBURY, MARYLAND

AL-977 (FAA)

RNAV (GPS) RWY 14

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

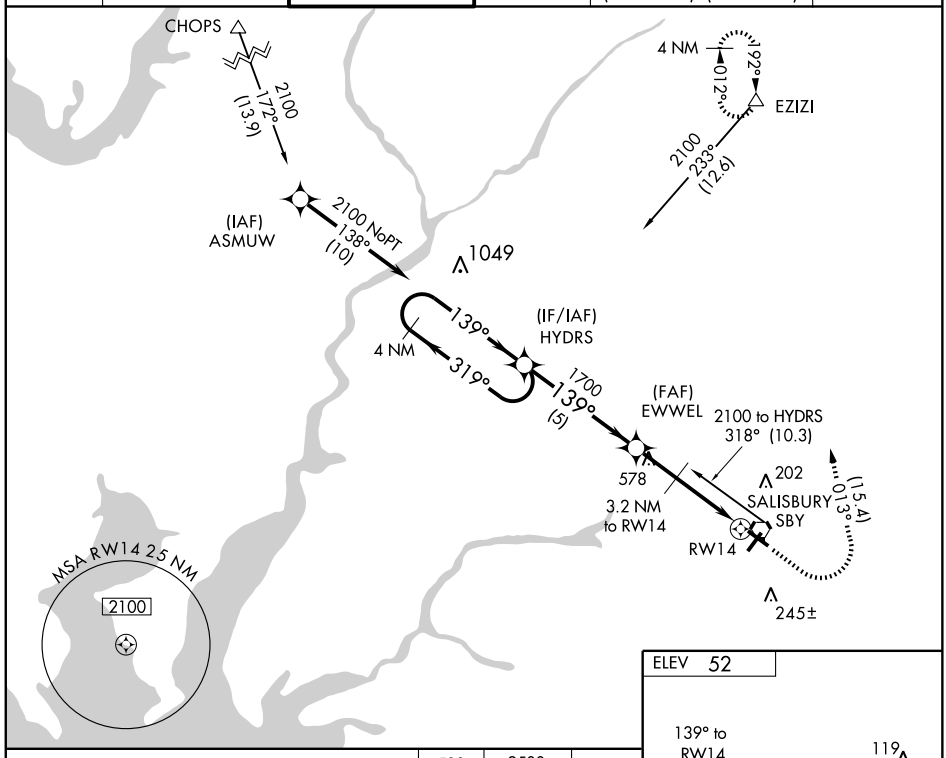
APP CRS	Rwy Idg	5500
139°	TDZE	49
	Apt Elev	52

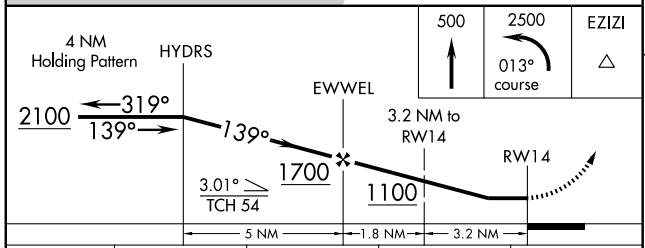
GPS or RNP - 0.3 required.
DME/DME RNP - 0.3 NA.

NA

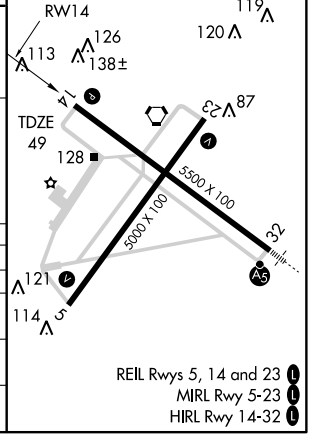
MISSED APPROACH: Climb to 500, then climbing left turn to 2500 via course 013° to EZIZI and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 (2230-0600) 123.775 (0600-2230)	122.95 A5





CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	NA			
LNAV	400-1 351 (400-1)			400-1¼ 351 (400-1¼)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)



REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	5000
229°	TDZE	50
	Apt Elev	52

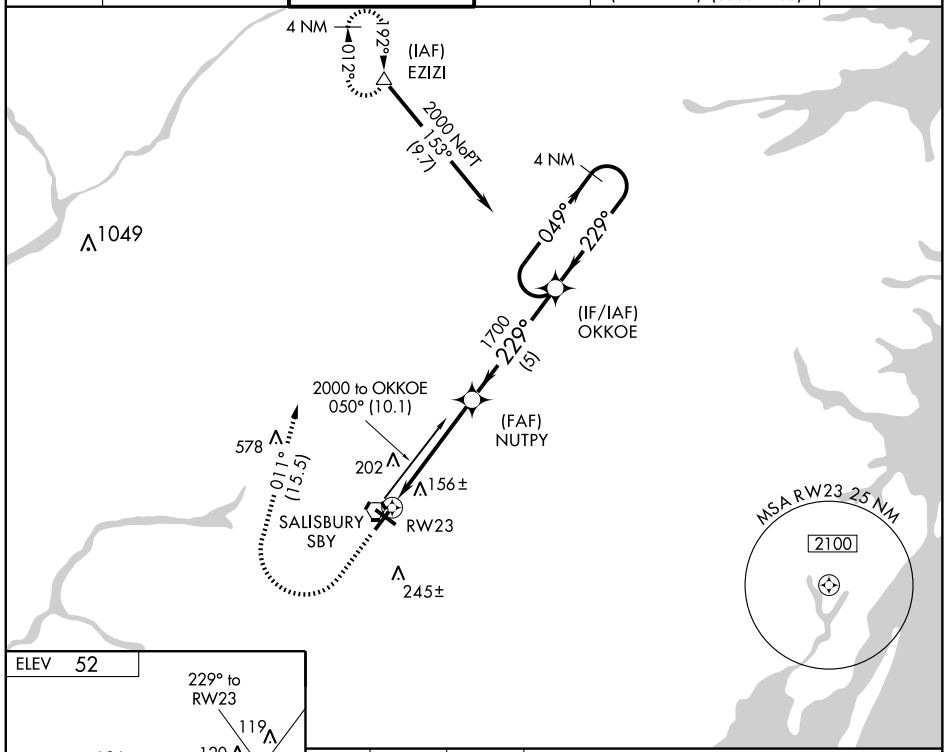
RNAV (GPS) RWY 23

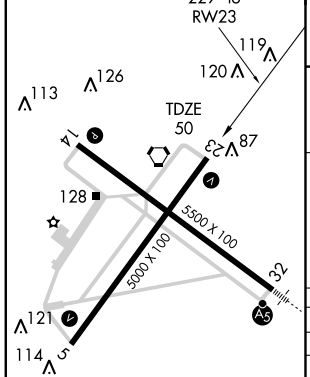
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

GPS or RNP - 0.3 required.
NA DME/DME RNP - 0.3 NA.

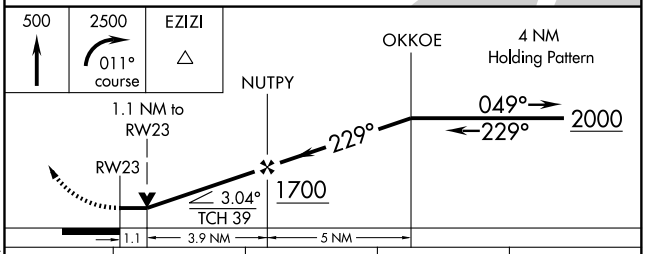
MISSED APPROACH: Climb to 500, then climbing right turn to 2500 via course 011° to EZIZI and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 123.775 (2230-0600) (0600-2230)	122.95 A5





REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L



CATEGORY	A	B	C	D
GLS DA	NA			
LNAV/VNAV DA	NA			
LNAV	420-1 370 (400-1)			420-1¼ 370 (400-1¼)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

NE-3. 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	5500
CH 48912	319°	TDZE	52
W32A		Apt Elev	52

RNAV (GPS) RWY 32

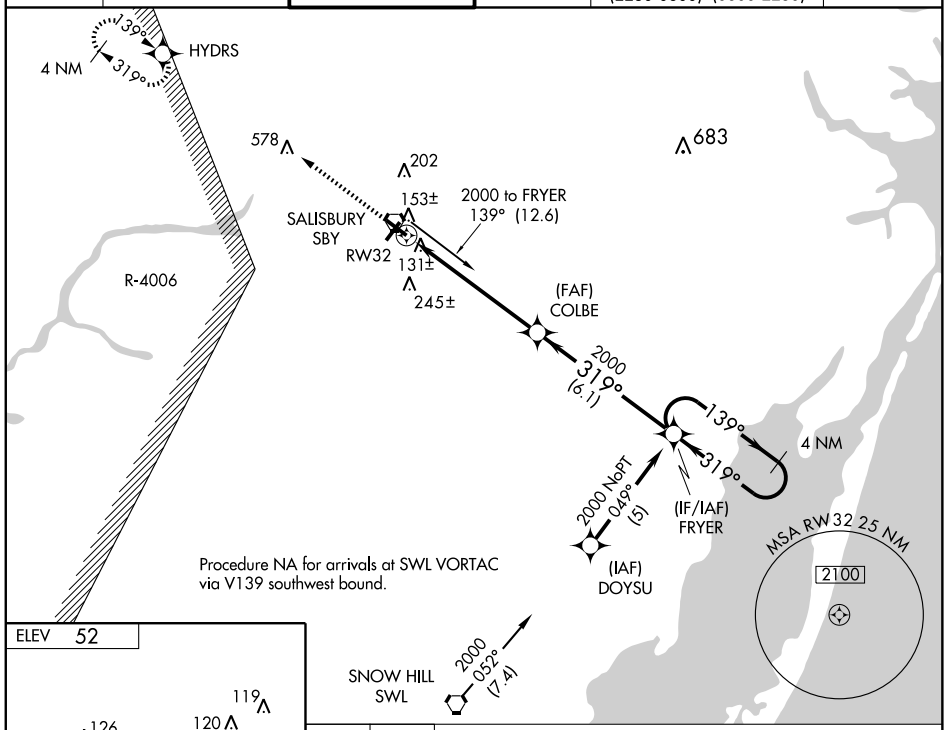
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

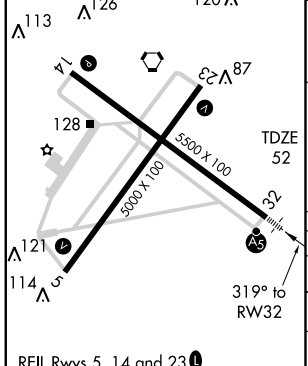
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 49°C (120°F). DME/DME RNP - 0.3 NA. When local altimeter setting not received, use Gerogetown altimeter setting and increase all DA 52 feet and all MDA 60 feet, increase LNAV Cat C visibility ¼ mile. For inoperative MALSR, increase LNAV Cat D visibility to 1¼. VDP and Baro-VNAV NA when using Georgetown altimeter setting.

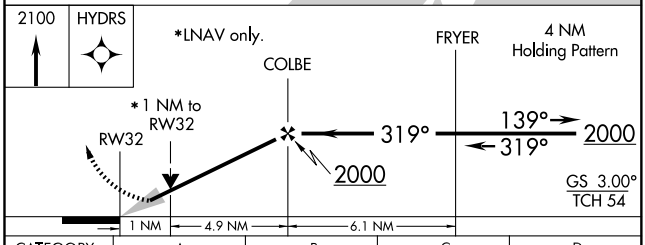
MALSR

MISSED APPROACH: Climb to 2100 direct HYDRS and hold.

ASOS	PATUXENT APP CON★	SALISBURY TOWER★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 (2230-0600) 123.775 (0600-2230)	122.95 A5







CATEGORY	A	B	C	D
LPV DA	252-½ 200 (200-½)			
LNAV/VNAV DA	399-¾ 347 (400-¾)			
LNAV MDA	420-½ 368 (400-½)			420-1 368 (400-1)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

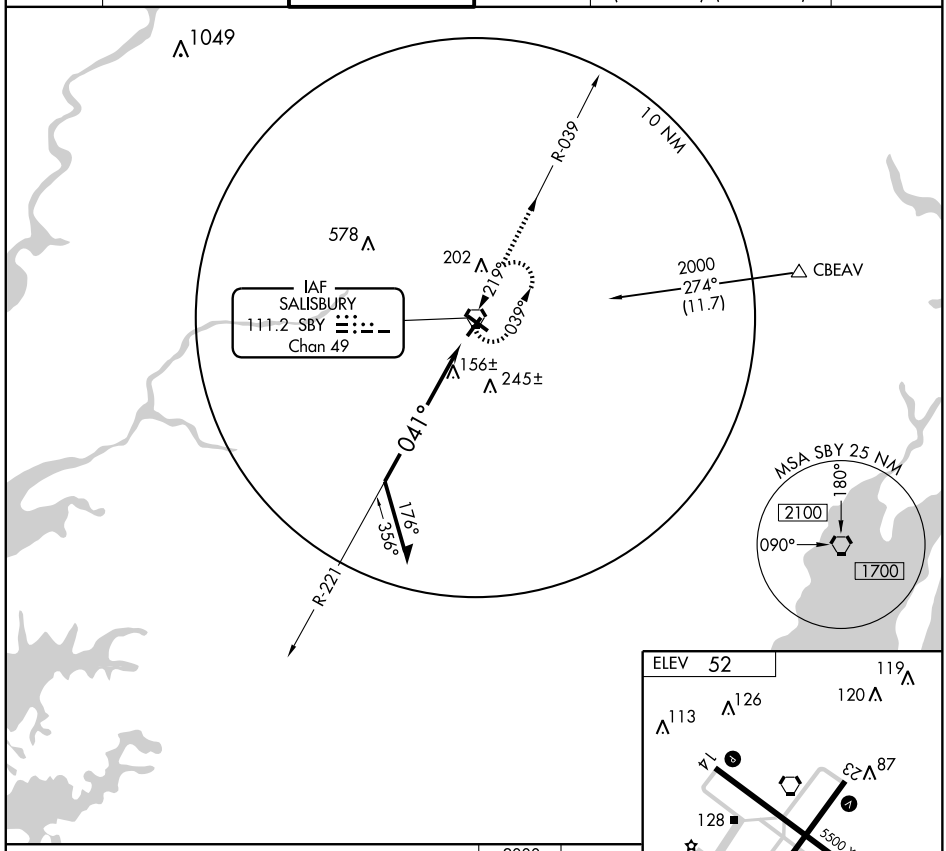
VORTAC SBY	APP CRS	Rwy Idg 5000
111.2	041°	TDZE 48
Chan 49		Apt Elev 52

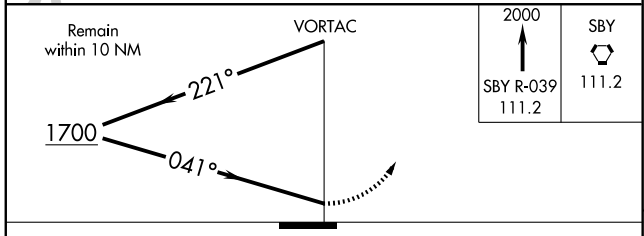
VOR RWY 5

SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

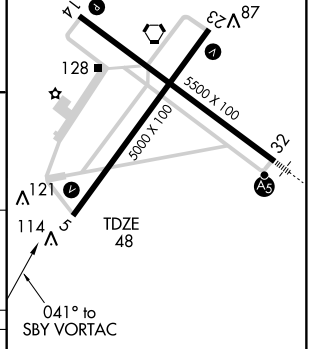
MISSED APPROACH: Climb to 2000 via SBY R-039 then direct SBY VORTAC and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 123.775 (2230-0600) (0600-2230)	122.95 A5





2000	SBY
SBY R-039 111.2	111.2



CATEGORY	A	B	C	D
S-5	460-1 412 (500-1)		460-1¼ 412 (500-1¼)	
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC SBY	APP CRS	Rwy Idg	5000
111.2	243°	TDZE	50
Chan 49		Apt Elev	52

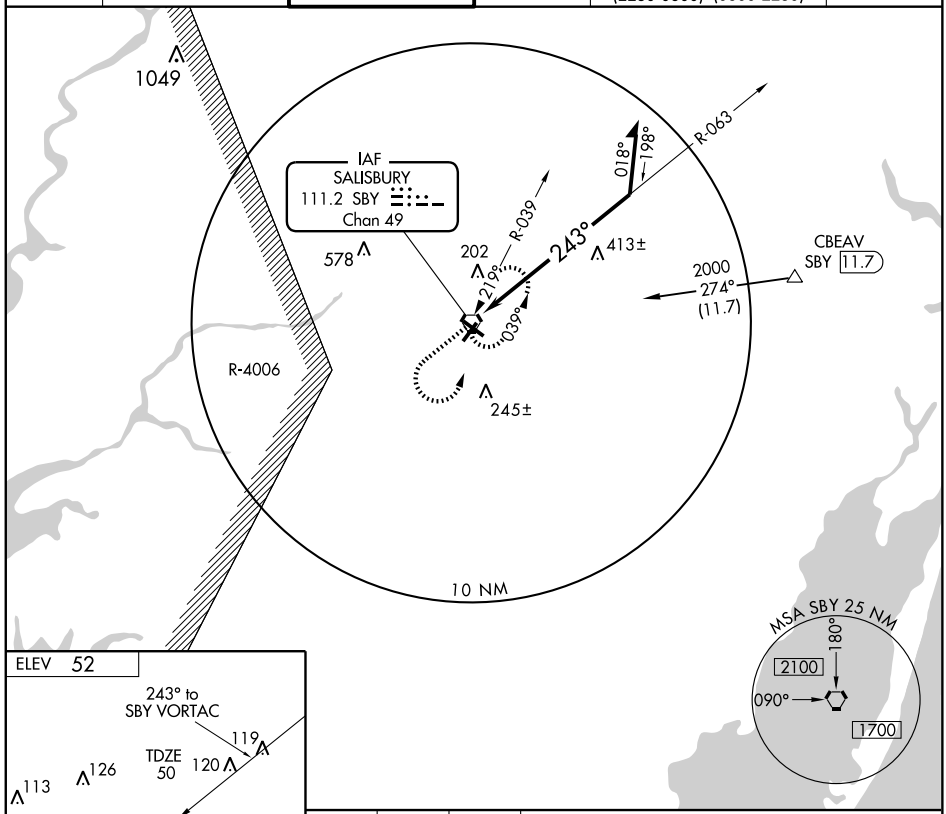
VOR RWY 23

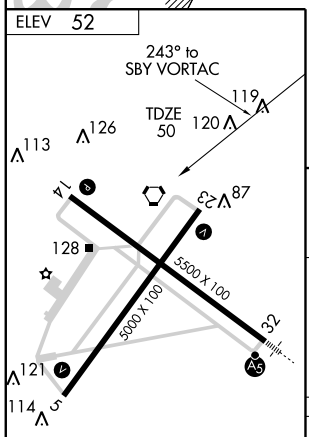
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

T Visibility reduction by helicopters NA.
A When local altimeter setting not received, use Georgetown altimeter setting and increase all MDA 60 feet. VDP NA when using Gerogetown altimeter setting.

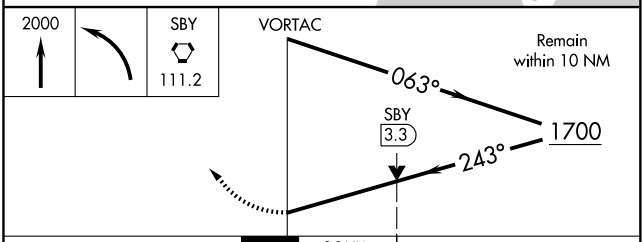
MISSED APPROACH: Climb to 2000 then left turn direct SBY VORTAC and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 123.775 (2230-0600) (0600-2230)	122.95 A5





REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L



CATEGORY	A	B	C	D
S-23	1100-1¼ 1050 (1100-1¼)	1100-1½ 1050 (1100-1½)	1100-3	1050 (1100-3)
CIRCLING	1100-1¼ 1048 (1100-1¼)	1100-1½ 1048 (1100-1½)	1100-3	1048 (1100-3)

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC SBY	APP CRS	Rwy Idg 5500
111.2	325°	TDZE 52
Chan 49		Apt Elev 52

VOR RWY 32

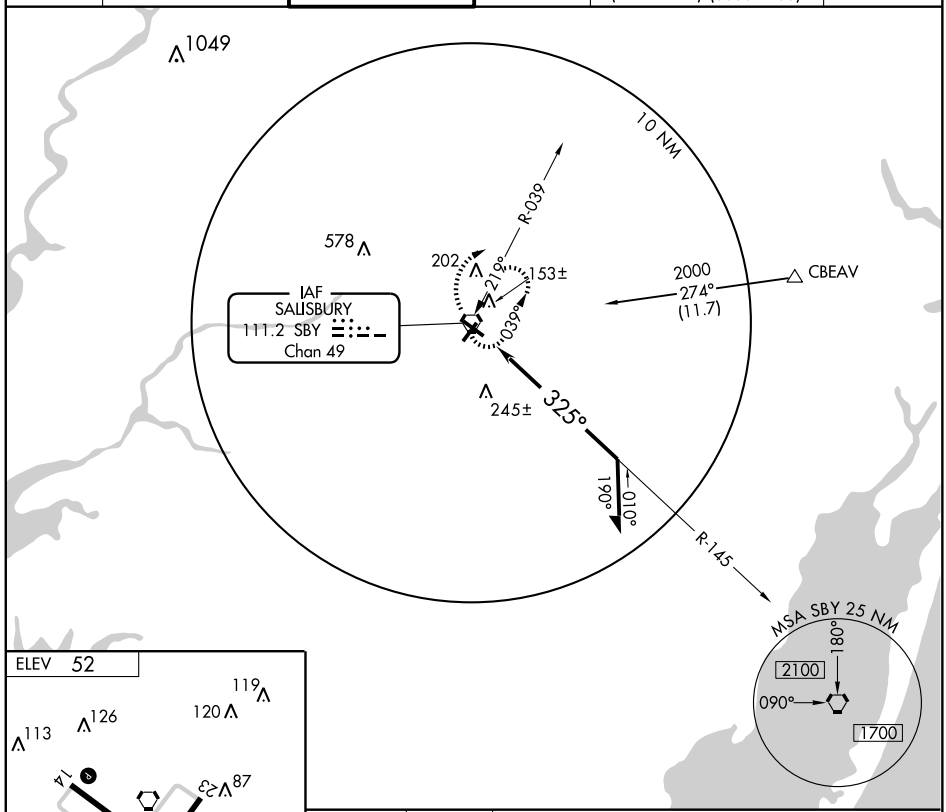
SALISBURY-OCEAN CITY WICOMICO RGNL (SBY)

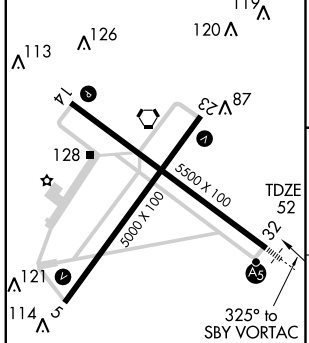
CAT D S-32 visibility increased ¼ mile for inoperative MALSR.

MALSR

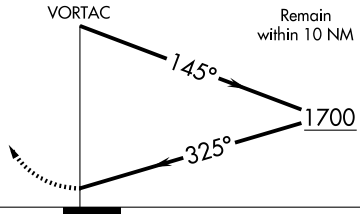
MISSED APPROACH: Climbing right turn to 2000 via SBY R-039 then direct SBY VORTAC and hold.

ASOS	PATUXENT APP CON ★	SALISBURY TOWER ★	GND CON	CLNC DEL	UNICOM
118.325	127.95 314.0	119.425 (CTAF) L	123.775	118.55 123.775 (2230-0600) (0600-2230)	122.95





2000	SBY
SBY R-039	111.2
111.2	



CATEGORY	A	B	C	D
S-32	460-½ 408 (500-½)		460-¾ 408 (500-¾)	460-1 408 (500-1)
CIRCLING	460-1 408 (500-1)	520-1 468 (500-1)	520-1½ 468 (500-1½)	620-2 568 (600-2)

REIL Rwys 5, 14 and 23 L
MIRL Rwy 5-23 L
HIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

RNAV (GPS) RWY 11

STEVENSVILLE/BAY BRIDGE (W29)

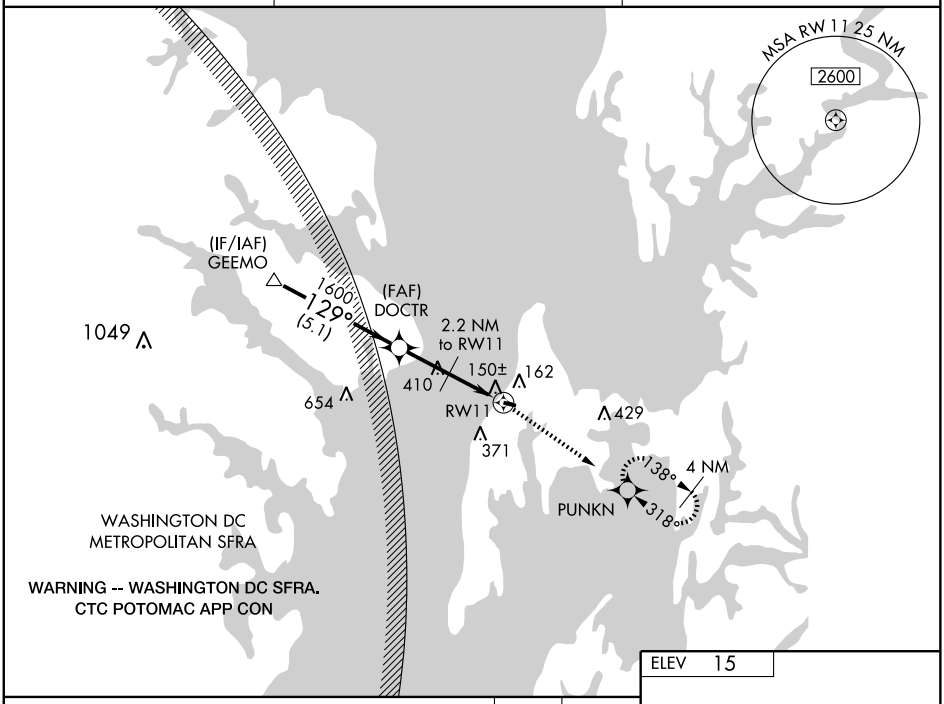
APP CRS	Rwy Idg	2903
129°	TDZE	15
	Apt Elev	15

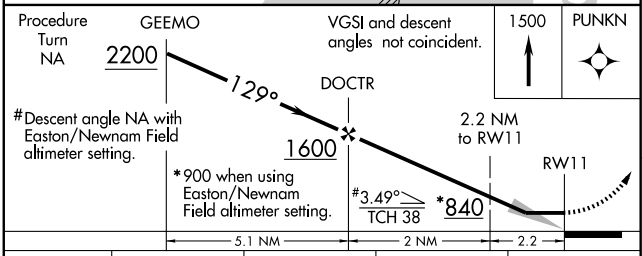
NA

Obtain local altimeter setting on CTAF; when not received, use Easton/Newnam Field altimeter setting.
DME/DME RNP-0.3 NA.

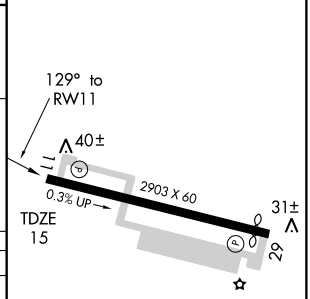
MISSED APPROACH: Climb to 1500 direct PUNKN WP and hold.

AWOS-3	POTOMAC APP CON	UNICOM
120.575	119.0 282.275	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	400-1 385 (400-1)		NA	
CIRCLING	460-1 445 (500-1)	480-1 465 (500-1)	NA	
EASTON/NEWNAM FIELD ALTIMETER SETTING MINIMUMS				
LNAV MDA	460-1 445 (500-1)		NA	
CIRCLING	500-1 485 (500-1)		NA	



REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	2713
294°	TDZE	15
	Apt Elev	15

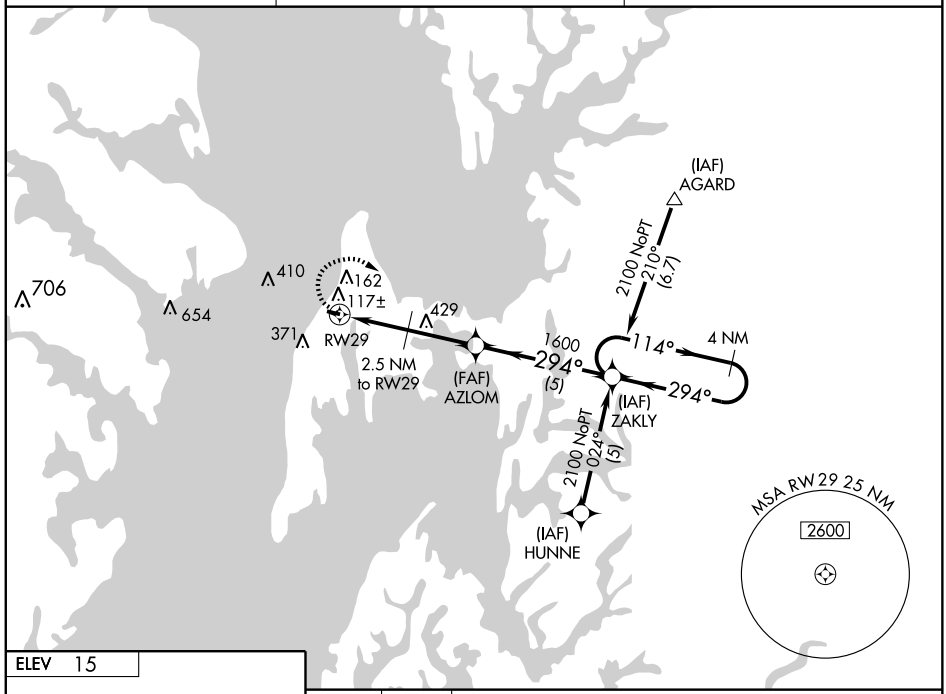
RNAV (GPS) RWY 29

STEVENSVILLE/BAY BRIDGE (W29)

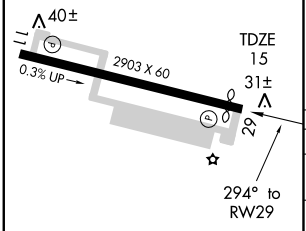
▼ NA — Obtain local altimeter setting on CTAF; when not received, use Easton/Newnam Field altimeter setting minimums. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing right turn to 2100 direct ZAKLY WP and hold.

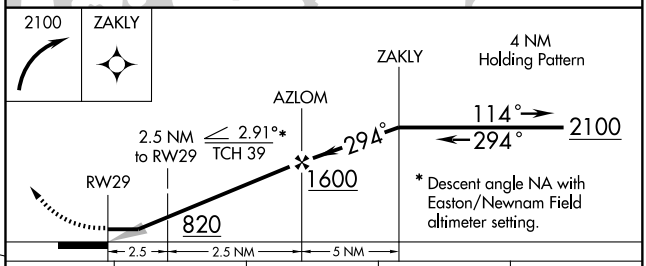
AWOS-3	POTOMAC APP CON	UNICOM
120.575	119.0 282.275	123.0 (CTAF) L



ELEV 15



REIL Rwys 11 and 29 L
MIRL Rwy 11-29 L



CATEGORY	A	B	C	D
LNAV MDA	380-1 365 (400-1)		NA	
CIRCLING	460-1 445 (500-1)	480-1 465 (500-1)	NA	
EASTON/NEWNAM FIELD ALTIMETER SETTING MINIMUMS				
LNAV MDA	420-1 405 (500-1)		NA	
CIRCLING	500-1 485 (500-1)		NA	

NE-3, 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	1510
136°	TDZE	799
	Apt Elev	799

RNAV (GPS) RWY 14

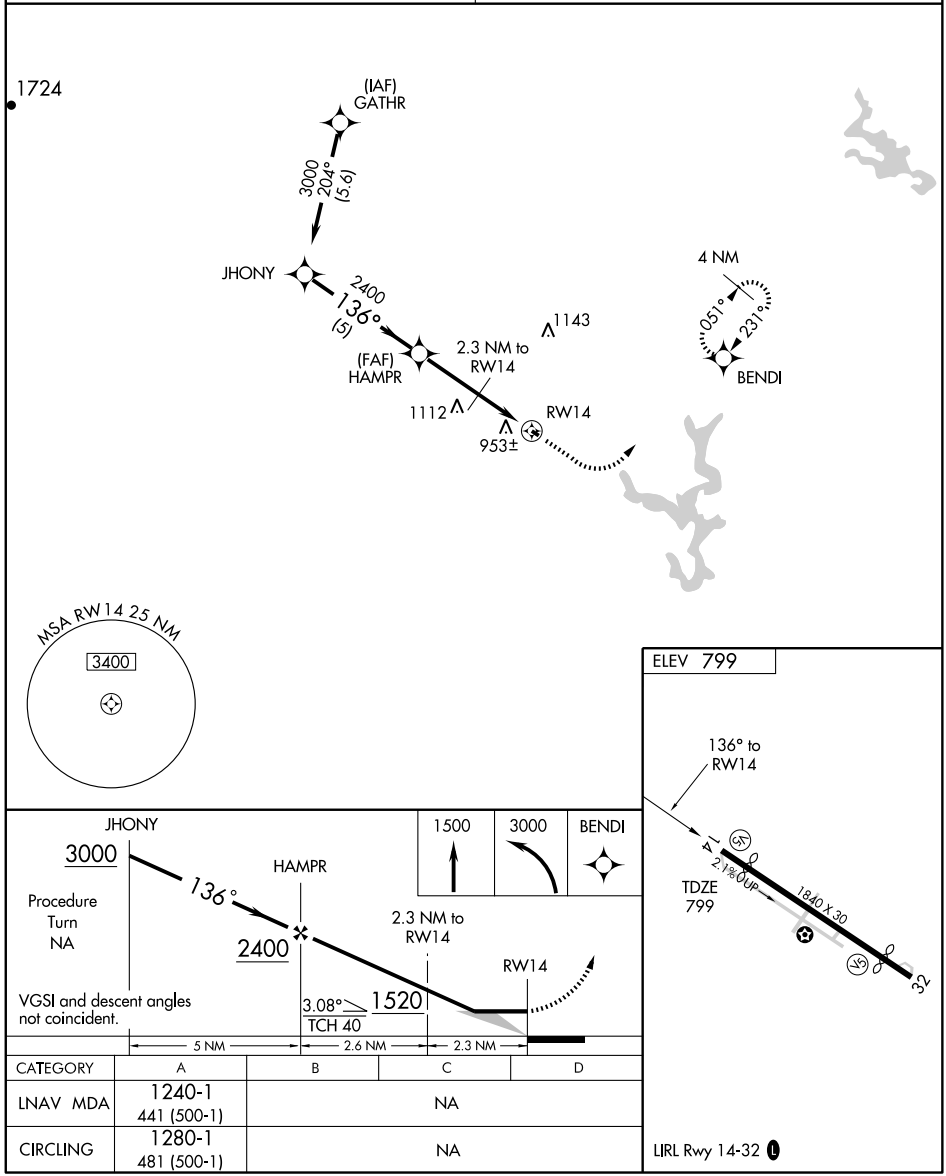
WESTMINSTER / CLEARVIEW AIRPARK (2W2)

T
A NA

Use Carroll County Rgnl/Jack B. Poage Field altimeter setting. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 1500, then climbing left turn to 3000 direct BENDI WP and hold.

POTOMAC APP CON	UNICOM
125.525 291.625	122.8 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1240-1 441 (500-1)	NA		
CIRCLING	1280-1 481 (500-1)	NA		

LIRL Rwy 14-32 L

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC EMI 117.9 Chan 126	APP CRS 235°	Rwy Idg N/A TDZE N/A Apt Elev 799

VOR-A

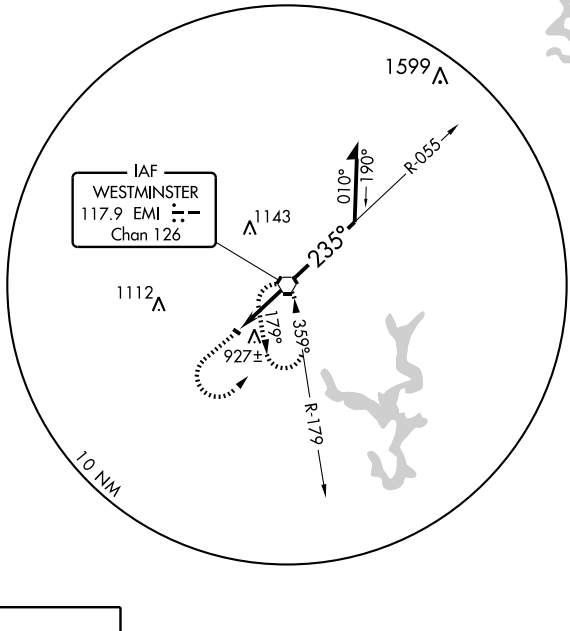
WESTMINSTER/ CLEARVIEW AIRPARK (2W2)

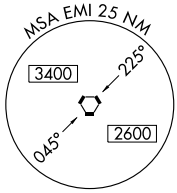
T
NA

Use Carroll County Rgnl/Jack B. Poage Field altimeter setting.

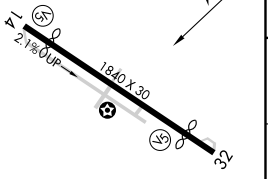
MISSED APPROACH: Climb to 1500, then climbing left turn to 2600 direct EMI VORTAC and hold.

POTOMAC APP CON	UNICOM
125.525 291.625	122.8 (CTAF) L

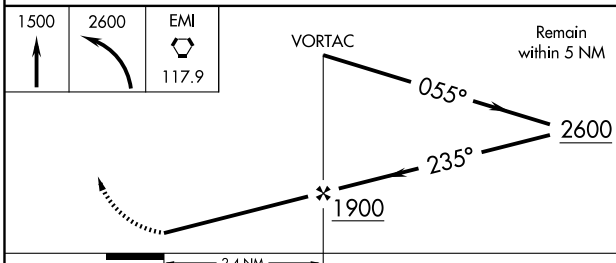




ELEV 799



LIRL Rwy 14-32 L



FAF to MAP 2.4 NM					
Knots	60	90	120	150	180
Min:Sec	2:24	1:36	1:12	0:58	0:48

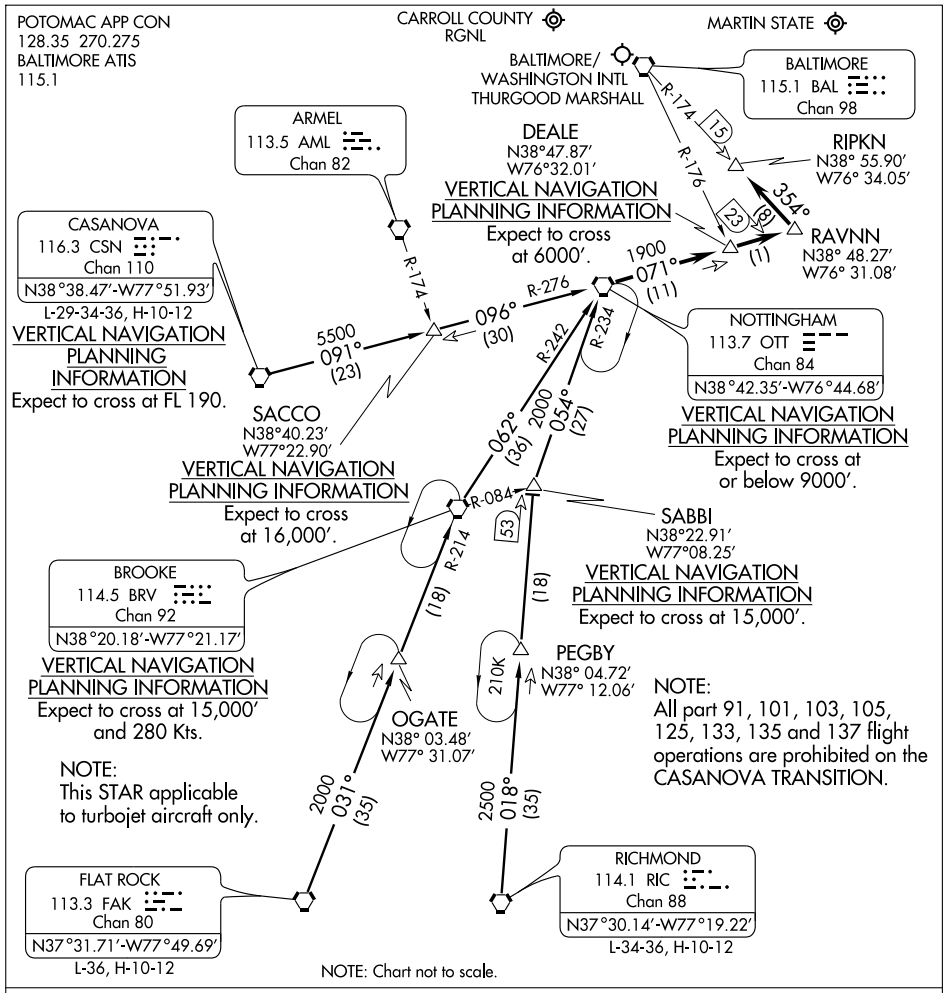
CATEGORY	A	B	C	D
CIRCLING	1280-1 481 (500-1)	NA		

NE-3. 17 DEC 2009 to 14 JAN 2010

(OTT.OTT6) 08101 ST-804 (FAA)

NOTTINGHAM SIX ARRIVAL

BALTIMORE, MARYLAND



ARRIVAL ROUTE DESCRIPTION

CASANOVA TRANSITION (CSN.OTT6): From over CSN VORTAC via CSN R-091 and OTT R-276 to OTT VORTAC. Thence . . . .

FLAT ROCK TRANSITION (FAK.OTT6): From over FAK VORTAC via FAK R-031 and BRV R-214 to BRV VORTAC, then via OTT R-242 to OTT VORTAC. Thence . . . .

RICHMOND TRANSITION (RIC.OTT6): From over RIC VORTAC via RIC R-018 to SABBI INT, then via OTT R-234 to OTT VORTAC. Thence . . . . . From over OTT VORTAC via OTT R-071 to RAVNN INT, then via BAL R-174 to RIPKN INT. Expect radar vectors to final approach course after passing RIPKN INT.

NE-3, 17 DEC 2009 to 14 JAN 2010

WAAS	APP CRS	Rwy Idg	5100
CH 65607	159°	TDZE	789
W16A		Apt Elev	789

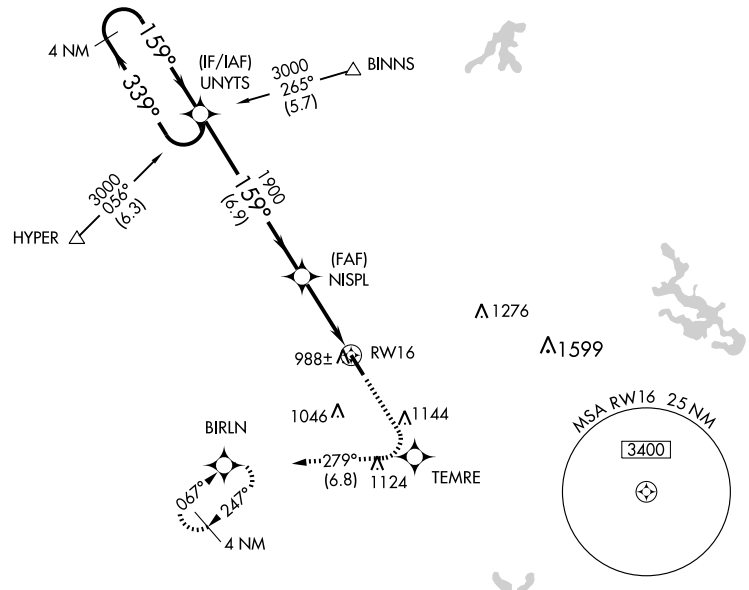
WESTMINSTER/
CARROLL COUNTY RGNL/JACK B. POAGE FIELD (DMW)

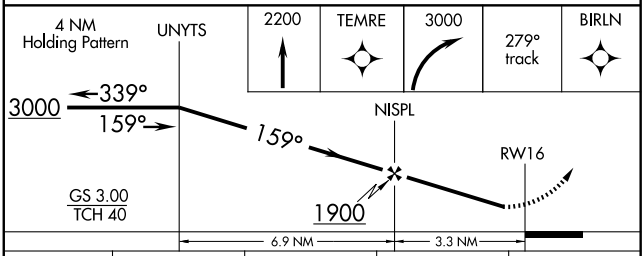
RNAV (GPS) RWY 16

DME/DME RNP - 0.3 NA.

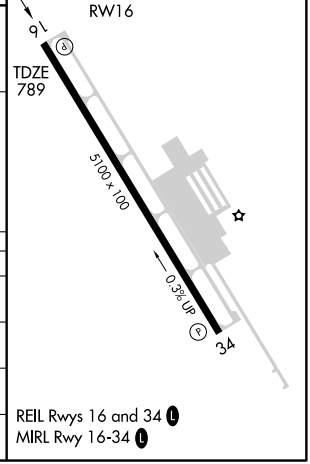
MISSED APPROACH: Climb to 2200 direct TEMRE then climbing right turn to 3000 via 279° track to BIRLN and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL (GCO)	UNICOM
121.25	125.525 291.625	121.725	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1130-1¼ 341 (400-1¼)			NA
LNAV/VNAV DA	NA			
LNAV MDA	1240-1 451 (500-1)		1240-1¼ 451 (500-1¼)	NA
CIRCLING	1300-1¼ 511 (600-1¼)		1300-1½ 511 (600-1½)	NA



REIL Rwys 16 and 34 L
MIRL Rwy 16-34 L

NE-3. 17 DEC 2009 to 14 JAN 2010

APP CRS	Rwy Idg	5100
339°	TDZE	788
	Apt Elev	789

RNAV (GPS) RWY 34

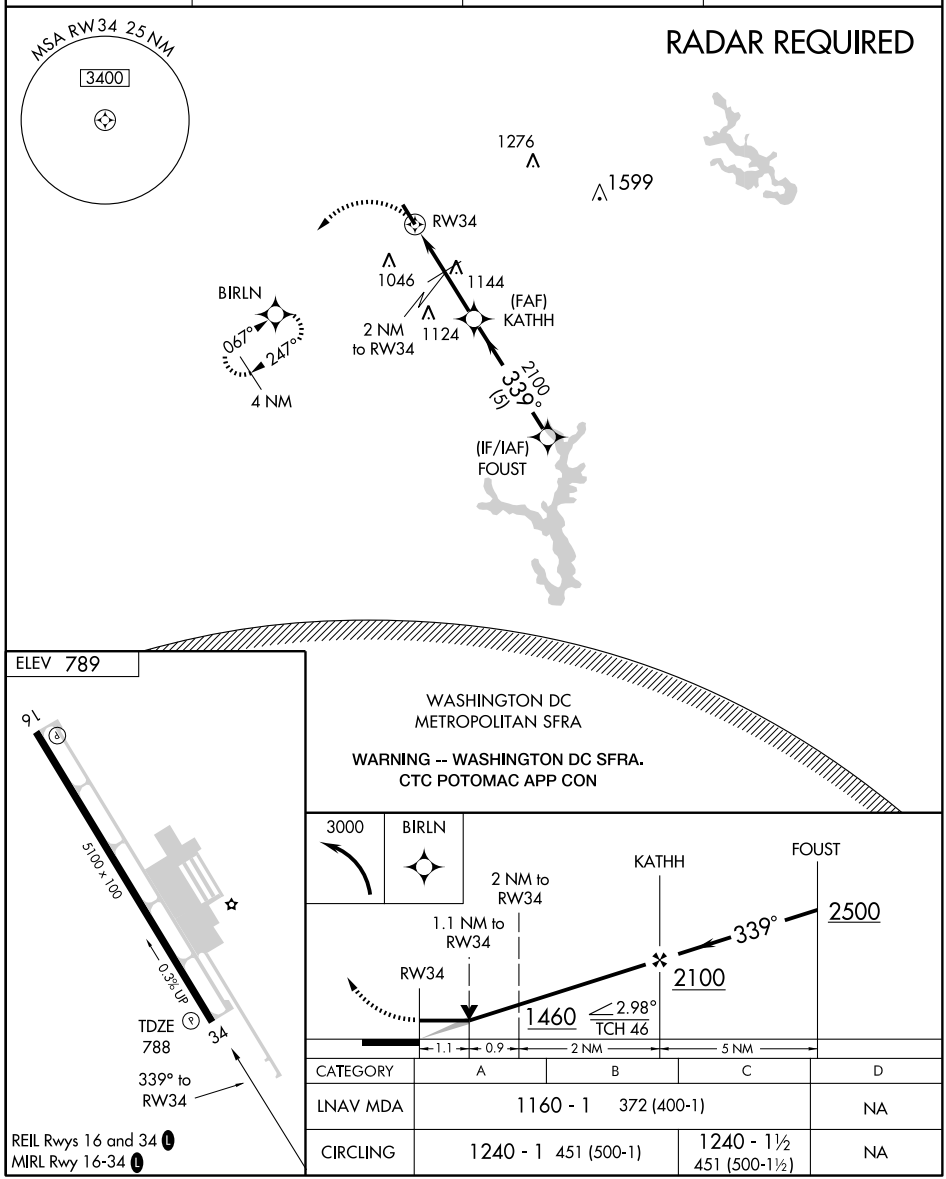
WESTMINSTER/CARROLL COUNTY RGNL/JACK B. POAGE FIELD (DMW)

GPS or RNP - 0.3 required.
DME/DME RNP - 0.3 NA.

NA

MISSED APPROACH: Climbing leftt turn to 3000 direct BIRLN WP and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL (GCO)	UNICOM
121.25	125.525 291.625	121.725	122.7 (CTAF) L



CATEGORY	A	B	C	D
LNAV MDA	1160 - 1 372 (400-1)			NA
CIRCLING	1240 - 1 451 (500-1)		1240 - 1½ 451 (500-1½)	NA

NE-3. 17 DEC 2009 to 14 JAN 2010

VORTAC EMI 117.9 Chan 126	APP CRS 358°	Rwy Idg 5100 TDZE 788 Apt Elev 789

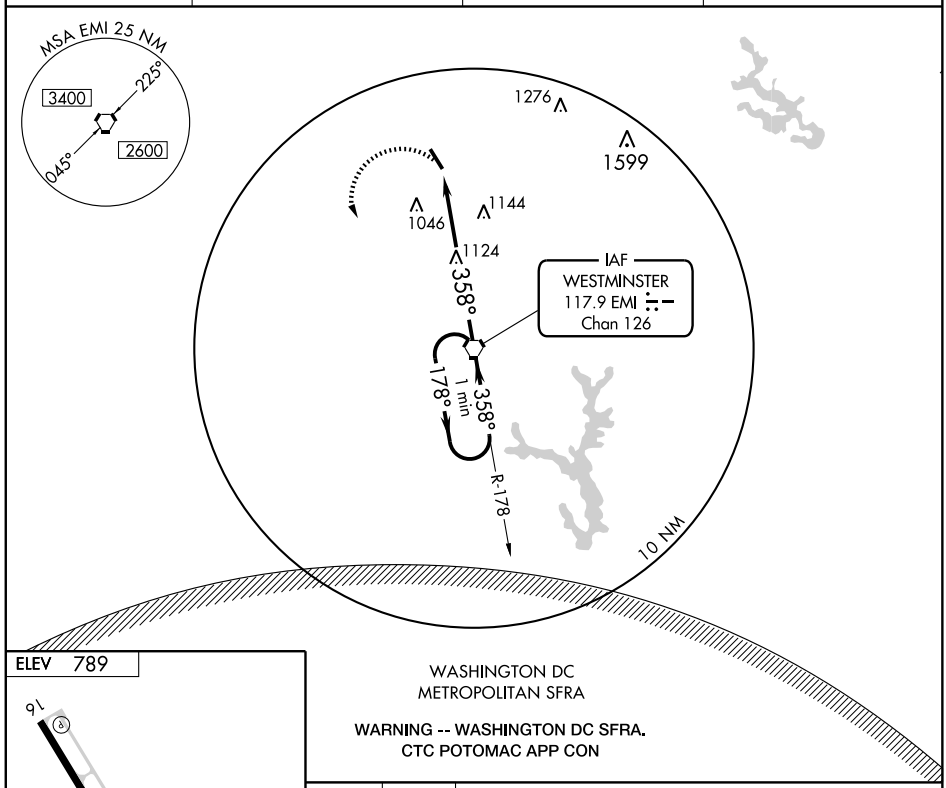
WESTMINSTER/
CARROLL COUNTY RGNL/JACK B. POAGE FIELD (DMW)

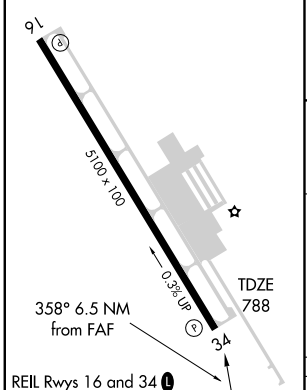
VOR RWY 34

NA

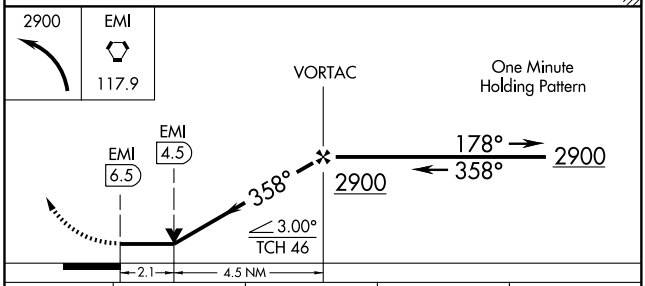
MISSED APPROACH: Climbing left turn to 2900 direct EMI VORTAC and hold.

AWOS-3	POTOMAC APP CON	CLNC DEL (GCO)	UNICOM
121.25	125.525 291.625	121.725	122.7 (CTAF) L





FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10



CATEGORY	A	B	C	D
S-34	1480-1	692 (700-1)	1480-2 692 (700-2)	NA
CIRCLING	1480-1	691 (700-1)	1480-2 691 (700-2)	NA

NE-3. 17 DEC 2009 to 14 JAN 2010